

CONTENTS.

	PAGE
INTRODUCTION	v.
SUMMARY OF STATISTICS	xiii.
POPULATION	1
DENSITY OF POPULATION	1
HOUSING—Inhabited Houses	1
Housing Schemes	2
VITAL STATISTICS—POPULATION, BIRTHS, DEATHS, INFANTILE MORTALITY, 1861-1936	3
Marriages	3
Births	3
Deaths and Death-rates	4
Table—Population, Deaths, etc., in each Ward	5
Table—Causes of Death and Death-rates at Certain Age-Periods	6
Ward Mortality	7
CAUSES OF DEATH—	
Epidemic Diseases	8
Influenza	8
Tuberculosis	8
Cancer	10
Diseases of the Nervous System	10
„ Circulatory System	10
„ Respiratory System	10
„ Digestive System	10
„ Genito-Urinary System	10
DEATHS BY VIOLENCE	11
INFECTIOUS DISEASES—NOTIFICATIONS—MONTHLY	11
Notifications and Deaths in each Ward	14
Notifications according to size of House	15
MOTOR AMBULANCE SERVICES	16
DISINFECTION OF HOUSES, ETC.	16
RECEPTION HOUSE	17
INTERMENTS	17
HOSPITAL EXPENDITURE	18
PUBLIC HEALTH EXPENDITURE, 1909-1936	18
HEALTH PROPAGANDA	19
TUBERCULOSIS—REPORT BY TUBERCULOSIS OFFICER	20
Pulmonary Tuberculosis—Notifications	22
„ „ Deaths	23
Non-Pulmonary Tuberculosis—Notifications	26
„ „ Deaths	26
Institutional Treatment	27
Royal Victoria Hospital	27
Colinton Mains Hospital	28
Polton Farm Colony	31
Dispensaries	31
Artificial Sunlight Treatment	32
Extra Nourishment	32
Drugs	32

CITY HOSPITAL FOR INFECTIOUS DISEASES—REPORT BY INTERIM MEDICAL SUPERINTENDENT .	33
BACTERIOLOGICAL SERVICES—REPORT BY UNIVERSITY BACTERIOLOGY DEPARTMENT . . .	44
MATERNITY AND CHILD WELFARE—REPORT BY CHILD WELFARE MEDICAL OFFICER . . .	57
VENEREAL DISEASES—REPORT BY CLINICAL MEDICAL OFFICER	89
MUNICIPAL GENERAL HOSPITALS—REPORT BY MEDICAL SUPERINTENDENT	94
MENTAL HEALTH SERVICES—BANGOUR MENTAL HOSPITAL	110
GOGARBURN CERTIFIED INSTITUTION	116
SCHOOL MEDICAL SERVICE	122
PORT SANITARY ADMINISTRATION	143
FACTORIES AND WORKSHOPS	145

PHOTOGRAPHS.

THE NEW VENEREAL DISEASES PAVILION AT EDINBURGH ROYAL INFIRMARY	<i>Facing page</i>	80
ONE OF THE EXAMINATION ROOMS IN THE NEW PAVILION	" "	81
COUPER STREET CLEARANCE AREA : COUPER STREET AND EAST CROMWELL STREET	" "	150
" " " " TYPES OF BUILDINGS	" "	151

REPORT OF SANITARY DEPARTMENT.

HOUSING	149
Housing (Scotland) Acts, 1919-1935—Improvement Schemes	149
Housing (Scotland) Act, 1930—Clearance Areas	150
Individual Unfit Houses	151
Bug-Infestation of Houses	151
Supervision of Re-Housing Areas	152
“Ticketed” Houses	152
Housing Repairs and Improvements	152
Rural Housing Improvements	152
Increase of Rent, etc., Acts	153
Overcrowding	153
GENERAL SANITATION	153
Nuisances and Sanitary Improvements	153
Nuisances from Dry-Cleaning Plants	154
Health and Hygiene Exhibition	155
Sub-Letting	155
Sanitary Conveniences for Houses	155
Places of Public Entertainment	155
Offensive Trades	156
VERMIN REPRESSION	156
Rat Destruction	156
Rat Week	156
Vermin other than Rats	156
Verminous Children, Bedding, Etc.	157
LODGING HOUSES	157
Common Lodging Houses	157
Farmed-Out Houses	157
Houses Let-in-Lodgings	158
Accommodation for Seasonal Workers	158

	PAGE
SMOKE ABATEMENT	158
Measurement of Atmospheric Pollution	158
Factories and Workshops	159
Public Complaints	159
Railways	159
Steam Road Wagons	160
Inspections and Improvements	160
Domestic Smoke	160
Gas	160
Electricity	160
SHOPS ACTS, 1912-1934	161
Public Holidays	161
Young Persons	162
Arrangements for Health and Comfort	162
Statistics	162
FOOD PREMISES	163
Foodshops and Restaurants	163
Ice-Cream Shops	163
Milk Supply	163
The Milk (Special Designations) Order (Scotland), 1930	164
SALE OF FOOD AND DRUGS ACTS, ETC.	164
Milk	164
The Milk (Special Designations) Order (Scotland), 1930	164
Ice Cream	165
Mince	166
Sausages	166
Imported Foodstuffs	166
Metallic Contamination of Canned Foodstuffs	166
The Fertilisers and Feeding Stuffs Act, 1926	166
The Rag Flock Acts, 1911 and 1928	167
The Merchandise Marks Act, 1926	167
The Pharmacy and Poisons Act, 1933	167
PORT SANITARY INSPECTION	168
Shipping Arrivals	168
Sanitation	168
Cleansing	170
V.D. Clinics	170
PROSECUTIONS	170
STAFF	170
APPENDICES—	
Housing (Scotland) Acts, 1925-1930 and Housing (Inspection of District) Regulations, 1928—Annual Statement	171
Housing (Scotland) Acts, 1930-1935—Progress Report	172
Nuisances Abated and Sanitary Improvements	173
Summary	176
Sanitary Conveniences Used in Common	177
Atmospheric Pollution—Monthly Record of Deposits	178
Shops Acts, 1912-1934—Annual Statement	179
Port Sanitary Inspection—Annual Statement	180
Prosecutions—Annual Statement	181

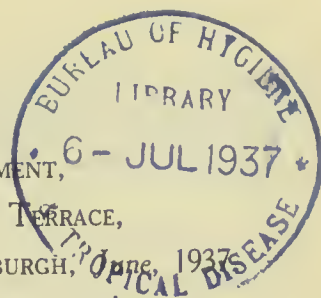
REPORT OF VETERINARY DEPARTMENT.

MILK AND DAIRIES (SCOTLAND) ACT, 1914 :—	PAGE
Inspection of Cows and Dairy Byres	183
Health of Cows, etc.	184
Tuberculosis in Dairy Cows	184
Number of Cowsheds	184
Milk and Dairies Order, 1934	185
Milk and Dairies (Scotland) Act, 1914	185
Milk (Special Designations) Order (Scotland), 1930	185
Milk Supply—City Hospitals	185
Bacteriological Laboratory :—	
Bacteriological Examination of Milk	186
Milk from Individual Cows in City Byres	186
Bulk Milk Samples	187
Biological Test of Graded Milks	187
Summary of Examinations made	187
Preparation of Vaccines	188
INSPECTION OF MEAT AND OTHER FOODS :—	
Fat Stock Markets	188
Abattoir	188
Carcases and Offal condemned in Abattoir	188
Congenital Tuberculosis in Calves	191
Meat Contracts—City Hospitals, etc.	191
Wholesale Dead Meat Markets	191
Retail Shops, Street Hawkers, etc.	191
Foodstuffs seized in Markets, etc.	192
Merchandise Marks Orders	192
Carcases, etc., submitted for inspection	192
Approval of Meat Storage	192
PORT FOOD INSPECTION	193
SUMMARY SHOWING UNSOUND FOODSTUFFS DEALT WITH	194
DISEASES OF ANIMALS ACTS :—	
Anthrax	195
Foot and Mouth Disease	196
Parasitic Mange	196
Sheep Scab	196
Sheep (Movement into Scotland and Northumberland) Order	196
Swine Fever	196
Regulation of Movement of Swine Order	197
Tuberculosis Order	197
Control of Dogs Order	198
Warble Fly (Dressing of Cattle) Order	198
Importation of Animals	198
Animals (Importation) Order of 1930	199
Certification for Export	199
Sea Transport of Animals	199
Transit of Animals Orders	199
Markets, Sales and Lairs Order	200
Summary of Contraventions	200
PROTECTION OF ANIMALS (SCOTLAND) ACT, 1912	200
LIGHTING AND CLEANSING DEPARTMENT STUD	200
POLICE MOUNTED CONTINGENT	200
CORPORATION FARMS	200

PUBLIC HEALTH DEPARTMENT,

JOHNSTON TERRACE,

EDINBURGH, 1937.



MY LORD PROVOST, LADIES AND GENTLEMEN,

I have the honour to submit the Annual Report on the Health of the City for the year 1936.

Population.—The estimated population for the City is 464,139—210,720 males and 253,419 females. This figure represents an increase of 3,262 on the previous year's estimate.

Births.—There were born 7,391 children—3,759 males and 3,632 females. This gives a birth-rate of 15·9 per 1,000. The birth-rate in 1935 was 15·3 per 1,000. Illegitimate births numbered 464 or 6·3 per cent. of the total. Liberton ward (25·1) had the highest birth-rate and Morningside ward (8·0) the lowest.

Deaths.—After adjustments for transfers the deaths from all causes totalled 6,226—3,017 males and 3,209 females—equal to a death-rate of 13·4 per 1,000. This is a slight increase over the preceding year—the death-rate in 1935 being 13·3 per 1,000 of the population, and the total number of deaths 6,132. The average death-rate for five years 1930-1935 was 13·1 per 1,000 of the population.

George Square ward (17·2) had the highest general death-rate. It is interesting to note that for the seventh successive year Gorgie ward has had the lowest general death-rate (9·8). Included in this ward, which has a population of 30,388, is the extensive housing area at Stenhouse.

The fall in the birth-rate, aided by a greater expectation of life, is causing a larger proportion of the population to be centred in the later decades of life. Forty-nine per cent. of the total deaths in the City related to persons over the age of 65 years. This "ageing" of the population is not confined to the City, but is the experience of the whole country and is a factor that is likely to have, in time, a profound effect on the whole social structure of the people, quite apart from its effects on social legislature.

When the total City deaths are analysed by cause it is found that one of the leading features is the increase in the number of deaths from diseases of the heart. These conditions, responsible for 1,317 deaths, are numerically the greatest single cause of death—451 of the deaths occurred in persons below the age of 65, that is to say, in those who are still by modern standards, young and active. The vast majority of cases of heart disease are rheumatic in origin though the symptoms of the causal rheumatic attack may have been vague and fleeting. Whilst advances in medical science may greatly mitigate the after-effects of rheumatism in the young, and while the School

Medical Service is of great assistance in detecting these early and mild cases, parents should constantly keep in mind the crippling effects on the heart of mild rheumatic attacks, such as "growing pains," and should seek early advice.

Measles caused 41 deaths, and, with one exception, all the deaths were of children under 5 years. Although generally held to be a mild and unimportant infection, measles has a great tendency to cause broncho-pneumonia in children under 3 years, and for this reason cases occurring in infancy should be treated with great care and attention. It is generally considered that the hospitalisation of the young sufferer from measles is of greater importance than the hospitalisation of the present-day mild type of scarlet fever.

Infantile Mortality.—Five hundred and five children died under one year of age, giving an infantile mortality rate of 68 per 1,000 registered live births. The deaths are 15 more than in the previous year, but the rate is 2 less. Apart from the diseases of early infancy and the deaths due to malformations and mal-developments, pneumonia remains the greatest single cause of death in this age group. Liberton ward had the highest infantile mortality and when this ward is analysed into its various districts it is found that Newcraighall had an infantile mortality rate of 203 per 1,000 live births, while the other districts of the ward had a rate of 73 per 1,000 live births. Half of the Newcraighall infantile deaths were due to premature birth or congenital debility, but the figures are too small to permit of any detailed conclusions being drawn from them. The greatest single cause of the Niddrie Mains infantile deaths was pneumonia, 11 deaths occurring from this cause. Congenital malformations and debility ranked second as a cause of infantile death.

The Tuberculosis Death-Rate was 0·8 per 1,000 of the estimated population. There were 358 deaths from all forms of tuberculosis in 1936, as against 335 deaths in 1935, when the rate was 0·7. The decline in the death-rate from tuberculosis since 1912 when notification of the disease was introduced has been spectacular, the rate falling from 1·9 to 0·8 per 1,000 of the population. Apart, however, from this reduction, the newer forms of treatment give results which, though difficult to analyse statistically, prove in practice to be extremely encouraging. They still remain applicable only to the early case, but their effect is to reduce the period of treatment and lessen the physically and financially crippling effects of the disease. In many cases it has been possible for the patient to have his employment kept open for him so that he has resumed his full earning capacity in a few months. It will be readily understood that this combats one of the dreads of the tuberculosis sufferer, namely, loss of employment through prolonged hospital residence.

The suggestion I made in last year's report that some preference be given to tuberculosis patients in the allocation of new Local Authority houses has been given effect to.

Infectious Diseases.—The prevalent type of scarlet fever in the City has been extremely mild. There were 1,083 cases reported and only 5 deaths, giving a death-rate of 0·5 per cent. of the notifications. Two of the deaths were country cases. The diphtheria wards received 643 cases, 367 of which were finally diagnosed as suffering

from diphtheria. Since the diagnosis of this disease is difficult in the early stages and since treatment must be prompt to be successful, practitioners have always been encouraged to send into hospital even suspect cases of diphtheria. That this policy has been justified, is shown by the fatality rate of 5·45 per cent.

There was an outbreak of infantile paralysis in the City and surrounding districts during the year. There were 20 cases occurring in the City and 21 cases were admitted to the City Hospital from the city and surrounding districts. The incidence was highest in school children, as is the rule, but the cases were not related nor could any connection be shown between any of them. It is an established fact that the resistance to this disease varies greatly and that the spread of the infection occurs in a very haphazard and irregular way, obeying none of the usual "rules" which govern the spread of most infections. Of the 21 cases in the City Hospital, 2 died in the acute stage. During recovery the children were under the care of an orthopædic surgeon and arrangements were made for them to continue the necessary treatment on their discharge from the City Hospital. Several of the most serious cases were transferred to the Princess Margaret Rose Hospital, when the infective stage had passed.

The resignation of Dr. Benson from the post of Medical Superintendent of the City Hospital was a serious loss, not only to the hospital, but to the Edinburgh Medical School. Dr. Benson has proved himself to be an excellent administrator and his knowledge of fevers was unsurpassed by any physician in the Kingdom. As a teacher he maintained the best traditions of the Edinburgh School, and during his service at the City Hospital had earned the esteem and high regard of hundreds of Edinburgh undergraduates.

Co-operation with the University we continue to regard as an essential factor in the staffing of our General Hospitals. The Professors of Medicine, Surgery, Midwifery, and Child Life have clinical control of our general wards. This is a plan which obviously tends towards the maintenance of a high standard of work.

The Professor of Bacteriology and the Professor of Pathology continue to act as Directors of our Bacteriological Services and of the Pathological Work respectively. Mr Stewart has been responsible for the performance of the bio-chemical work in the Western General Hospital.

All these services are technical in the extreme, and their modern practice calls for an expert knowledge such as can only be acquired by the specialists and for an extensive and costly laboratory staff and equipment. No Health Service or hospital can hope to even keep in touch with modern medical practice, much less take advantage of the latest advances of medicine, without the intimate aid of the scientific auxiliaries.

Professor Mackie's report on the work done by his laboratory for the Department is included in this report. A mere glance at it will show that apart from the routine investigations undertaken there has been, as before, a considerable volume of pure research work carried out. An important additional service is the routine cultivation test carried out on specimens from suspect cases of tuberculosis. The results of those tests aid in the prompt and accurate diagnosis of the disease.

During the year Professor W. T. Ritchie resigned his appointment as Director of the Medical Unit and was succeeded by Professor Murray Lyon. Professor Ritchie's great experience and profound judgment were of inestimable value to the hospitals. He joined the staff at a period of transition and he proved to be a veritable "tower of strength" at that critical time.

Child Welfare Department.—The work in this department has, as usual, been greatly facilitated by the enthusiasm of the Voluntary Workers. Edinburgh is particularly fortunate in having associated with its official health services those ladies who so unstintingly give of their time and experience to aid the less fortunately placed. A maternity and child welfare department without enthusiastic voluntary workers lacks the impetus they alone can give.

The infantile mortality rate is lower this year than last (68 deaths per 1,000 births against 70 deaths per 1,000 births in 1935), and although the rate has declined greatly over the past 20 years, and although it still compares favourably with other large towns, it remains the wish of everyone to see the rate lower still.

The death-rate in infants under one month has not been very materially affected by all our preventive work. Prematurity remains the great cause of death at this age, along with accidents at birth. A multiplicity of factors is at work here, and research into these causes of death is being carried out.

The illegitimate births numbered 464 or 6·3 per cent. of the total births. The infantile mortality rate among these infants was 106 per 1,000 live births. This is indicative of the general handicap under which the illegitimate child starts life.

The ante-natal clinics continue to show increasing attendances—no fewer than 5,755 expectant mothers receiving advice at these. The great majority of "new" cases continue to attend, as requested by the staff, but as I stressed in my report on Local Maternity Services, issued last summer, there is a definite need for a closer follow-up of defaulters.

The maternal mortality rate was 5·5 per 1,000 births, compared with 7·5 per 1,000 births in 1935. While small variations, as above, are not very significant, the slight fall is at least encouraging.

In the City there were 17 certified midwives and they attended 314 confinements. One case of puerperal sepsis occurred in this group of labours. Residents and pupil nurses attended 1,823 births and 12 per cent. of the total maternal deaths occurred in this group.

There were 2,916 births attended by private doctors, with or without nurses, and 35 per cent. of the total maternal deaths occurred in these cases.

In the maternity hospitals and training centres there were 3,542 births and 53 per cent. of the total maternal deaths occurred in these institutions.

These mortality rates are not to be used for comparative purposes, and the higher rates of the hospitals (which is the universal experience) are largely due to the most difficult cases of labour being ultimately sent to them.

The increasing interest and sympathy of the public towards the problems of maternal mortality are likely to produce new legislature. Under this, additional facilities and safeguards will be extended to the pregnant or parturient woman who hitherto had been unable to obtain them. The cost of such services will be amply refunded by the saving of life amongst women whom the community at large, and their husbands and children in particular, can ill afford to lose.

Venereal Diseases Department.—There is little change in the numbers of new patients compared with 1935. During the year there were 695 new cases of syphilis and 1,280 new cases of gonorrhœa. It may be noted that the total number of in-patients for the year was 1,278, which represents an increase of 20 per cent. over the previous year's number. This increase is not due to an increased number of patients or to additional beds available—it reflects, in reality, a changed outlook by the profession and public on these diseases.

The venereal diseases wards and clinics at the Royal Infirmary have been transferred to a new pavilion, which is shared with the Dermatology Department. A description and a photograph of the new building will be found in the report by the Venereal Diseases Medical Officer.

Municipal General Hospitals.—The volume of work undertaken in the three General hospitals continues to increase. In 1935 the number of patients treated was 6,425; in 1936 the number treated was 7,339.

The difficulties of staffing our general hospitals have been emphasised from time to time. This is an experience which is common to practically all the hospitals in the country, and for various reasons it is likely to remain so. Most of those who have studied the problem have insisted that long hours of work, poor remuneration, undue discipline and stiff examinations are the main causes which deter girls from entering the nursing profession. These are undoubtedly the main factors, but it is to be borne in mind that there has been over the past decade a marked decline in the actual numbers of females in the 20-25 years age group of the population of this country.

With the exception of certain of the night nursing staffs, the hours of duty in our hospitals do not seem to be unduly long. The difficulty of obtaining more staff and lack of accommodation have retarded any effort to shorten the hours of duty of the existing staff. A new Nurses' Home, at present under construction at the Western General Hospital, will provide ample accommodation, and it is likely that in the near future some new scheme of teaching the theory of nursing will be introduced to lessen the strain of study for examinations.

The staffing of our hospitals used for the chronic sick presents problems peculiar to themselves. These institutions are not teaching hospitals, *i.e.*, a nurse cannot sit her state examinations after a period of service there. The problem of staffing this

type of institution has been partially solved in different ways by authorities throughout the country. A scheme which would enable our nurses to spend their period of training between our "chronic" and "acute" hospitals would be well nigh ideal, for experience in the nursing of the chronic sick is absolutely essential if a nurse is to be fully trained. The other solution is to staff the hospitals for the chronic sick with women who, while they may be by mental make-up or temperament unfitted for the rush and bustle of an acute hospital or for the nervous strain of examinations, are yet conscientious and considerate in their nursing of the sick.

Ambulance Services.—The development of the General Hospital Scheme has entailed heavier calls on the ambulance service, not only on account of the larger number of admissions to hospital, but by reason of numerous transfers daily from one hospital to another. Patients on admission have to be conveyed in the first instance to the Western General Hospital for classification, which may result in their being sent to the Northern or Eastern General Hospital. There is also a considerable demand for patients to be conveyed from other hospitals and institutions to the Western Hospital for X-ray examination and other forms of specialist treatment.

At present the ambulance service is operated with difficulty owing to the lack of a central depot for the machines. A pooling arrangement is in force under which the six vehicles are available to meet calls by the Public Assistance Department and for removals to the City Hospital and the three General Hospitals.

The arrangement has not been wholly satisfactory. Occasionally when a period of pressure occurs calls cannot be met as promptly as they should. The Police ambulances are available in an emergency, but it is desirable that our own service should be adequate for all requirements. Proposals for the building of a central garage at the Western General Hospital, with suitable quarters for the drivers and attendants, are at present under consideration, and, if approved, will result in better control and a more satisfactory service.

Mental Services.—The mental welfare of the child continues to occupy an important position in the health services. A close co-operation exists between the School Medical Department and the Child Guidance Clinics.

The new Children's Blocks at Gogarburn Institution were opened in March. Both are single-storied buildings, accommodating 50 children, and will enable the children to be segregated from the adults. Despite these extensions it will be necessary to consider the provision of further accommodation since there is still a waiting list for admission, especially of children who have appeared in the courts for delinquencies.

The problem of the delinquent child is a particularly awkward one. The various voluntary associations, *i.e.*, Voluntary Mental Welfare Association and the psychological clinics, give the greatest possible assistance in such cases. The importance of a mental examination of delinquent children cannot be over-emphasised, since it is only on such an examination that the causes of delinquencies can be satisfactorily assessed and the readjustment of the child to his social environment successfully effected. The mentally defective child who is under five years of age forms a class for whom no legal

provision exists. While the majority of those children are best dealt with in their own homes, a proportion exists for whom some form of institutional care is imperative. With this end in view the Public Health Committee decided that a block of 20 cots be set aside at Gogarburn, outwith the boundaries of the institution, to which uncertified children may be admitted.

School Medical Service.—There has again been a general increase in the work done in this Service, a total of 91,215 cases having been seen by doctors and nurses in schools and clinics, as compared with 84,624 in 1935 and 50,567 in 1930.

The value of the increase in nursing staff from 16 to 18 is evidenced by the larger number of children examined in school for "neglect" (8,877 as against 4,745 in the previous year), and of home visits paid (2,779 as against 944 in 1935).

Both of these duties are of great value not only from the viewpoint of the health of the individual child, but also because of the social value in health education established by contact between parent and nurse. The further increase sanctioned in the number of nurses to 20 will, I believe, still further advance this important factor in Health Education.

Dental Propaganda.—Through the courtesy of the Dental Board of the United Kingdom, dental demonstrations were again given in the Municipal schools. The scope of these demonstrations is, by models and talks, to emphasise the importance of sound teeth and their care, with some advice on diet.

During the year two demonstrators gave talks, over two weeks, to some 6,000 children in 34 schools. In addition, as a new venture, four afternoons were allocated to Juvenile Instruction Centres to arouse the interest of adolescents who have left school.

The Head Teachers were unanimous in their estimate of the value of the demonstrations and next year it is hoped to experiment in extending this form of education by having two evening sessions for parents.

Housing.—The year 1936 was fraught with many difficulties in so far as rehousing of tenants from insanitary and over-crowded houses was concerned. Circumstances over which the Corporation had little or no control slowed up building operations with the result that the rehousing programme fell into arrears.

Nevertheless it was possible to promote 5 Clearance Areas dealing with 462 houses, affecting a population of 1,699 persons, and to close 135 "individual" unfit houses.

The Clearance Areas were situated at Couper Street, Leith ; Abbeyhill (1st and 2nd Sections) ; Albert Cottages, and Canongate (Duncan's Close).

The bug infestation of old properties is a matter of grave concern, and fully 90 per cent. of the houses in the Couper Street Clearance Area were found to be infested. Every precaution is taken to prevent the transference of bugs from the old houses to

the new houses by treating the furniture with H.C.N. at the fumigation chamber at Powderhall. The Inspectors of the Sanitary Department supervise this work and since the scheme was put into operation in September, 1934, the furniture and furnishings from 1,068 houses have been treated, with excellent results.

In the Housing (Scotland) Act, 1935, power is given to Local Authorities to disinfect from vermin any building which is to be demolished under the Housing Acts. It is felt, however, that the large tenemental properties in Edinburgh almost defy treatment in this way, but, as an experiment, the Corporation decided to deal with a badly-infested tenement in Couper Street Area and a special report on the subject will be submitted to the Public Health Committee.

The supervision of the tenants in the re-housing areas by the Sanitary Inspectresses continues to show good results, and it is pleasing to note that in Edinburgh 88·7 per cent. of the houses visited were found to be kept in a clean condition ; 10·2 per cent. fair and only 1·1 per cent. dirty.

Little progress was made during the year with the "decrowding" of overcrowded houses, but no real progress can be made in this direction until the houses being built under the 1935 Act are ready for occupation. It is not possible, without making a survey of all overcrowded houses in the City, to estimate the number of houses "decrowded" during the year, but there were 284 removals from overcrowded houses reported to the Sanitary Department.

A disquieting feature of the overcrowding problem is the fact that many of the "decrowded" houses are again overcrowded by the incoming tenants, and it is estimated that of 268 houses "decrowded" last year, 38 or 14 per cent. were re-overcrowded. This aspect of the overcrowding problem cannot be controlled until the "appointed day" and unless the Local Authority obtain the voluntary co-operation of house-owners and house-factors, the beneficial results of decrowding operations will be nullified.

Acknowledgments.—I desire to express my sincere thanks to the Chairman and Members of the Public Health Committee for their encouragement and support during the year.

To all my colleagues in the Public Health Service I acknowledge my high appreciation of the work being done and for the loyal and helpful co-operation extended to me.

I am, My Lord Provost, Ladies and Gentlemen,

Your Obedient Servant,

JOHN GUY,

M.D., D.P.H. (Camb.), F.R.F.P. & S. (Glas.), F.R.C.P. (Edin.),

Medical Officer of Health.

SUMMARY OF STATISTICS

For the Years 1932, 1933, 1934, 1935 and 1936.

	1932	1933	1934	1935	1936
Population Estimated to middle of year . .	447,800	452,773	457,099	460,877	464,139
Area of City—Acres . .	32,526	32,526	32,526	32,526	32,526
Density of Population—					
Persons per acre . .	13·8	13·9	14·1	14·2	14·3
Houses Inhabited . .	111,241	113,497	116,419	118,741	121,181
Marriages Registered . .	3,932	4,037	4,245	4,291	4,478
Birth-rate (Corrected for Country Births) . .	15·5	15·1	15·7	15·3	15·9
Death-rate (Corrected for Country Deaths) . .	13·5	13·2	12·8	13·3	13·4
Infantile Mortality . .	73	66	62	70	68
Cancer Death-rate . .	1·9	1·7	1·7	1·7	1·7
Pulmonary Tuberculosis Death-rate . .	·7	·7	·7	·6	·6
*Epidemic Diseases Death-rate	·5	·3	·3	·3	·3

* Includes Enteric Fever, Measles, Scarlet Fever, Whooping Cough, Diphtheria, and Diarrhœa and Enteritis under 2 years.

Note.—Further detailed statistics are shown in the Tables throughout this Report.

VITAL STATISTICS

AND

REPORTS RELATING TO VARIOUS SUB-DEPARTMENTS AND INSTITUTIONS.

POPULATION.

The Registrar-General's estimate of the resident population in the City of Edinburgh at mid year of 1936 was 464,139. This figure represents an increase of 3,262 on the previous year's estimate.

The estimate is based on the number of inhabited houses at Whitsunday, with adjustments for the movement of population due to emigration and other causes.

The following table shows the distribution of the population throughout the extended city, and includes residents in institutions and military quarters situated in the respective areas.

Area.	Males.	Females.	Total	Acres.	Persons Per Acre.
Edinburgh	150,510	181,009	331,519	10,877	30·5
Leith	36,025	43,325	79,350	1,641	48·4
Suburban	24,185	29,085	53,270	20,008	2·7
	210,720	253,419	464,139	32,526	14·3

Density.—The City extends to 32,526 acres and the density of population was 14·3 persons per acre. A table on page 5 shows the population and density in each of the twenty-three City wards. Persons resident in institutions and military quarters are, it will be noted in this table, excluded from the ward populations and shown under separate headings. This procedure contributes to the accuracy of the vital statistics relative to the respective wards.

HOUSING.

Inhabited Houses.—The Burgh Assessor has supplied me with the number and rentals of occupied dwelling houses on the Valuation Roll at Whitsunday, 1936. There is an increase of 2,440 when compared with the corresponding period in the previous year.

NUMBER OF DWELLING-HOUSES OCCUPIED AT WHITSUNDAY 1936.

Ward.		Under £5.	£5 and under £10.	£10 and under £15.	£15 and under £20.	£20 and under £30.	£30 and under £40.	£40 and under £50.	£50 and up- wards.	Total in each Ward.
1.	Calton	7	226	1,264	1,552	1,523	501	116	230	5,419
2.	Canongate	55	697	1,506	1,037	1,256	382	81	98	5,112
3.	Newington	2	118	661	570	1,273	822	536	1,751	5,733
4.	Morningside	1	16	30	149	1,068	2,227	1,507	1,972	6,970
5.	Merchiston	1	16	232	507	2,249	1,578	521	969	6,073
6.	Gorgie	12	58	1,606	2,178	3,344	398	63	74	7,733
7.	Haymarket	4	153	405	459	1,382	753	310	1,588	5,054
8.	St. Bernard's	9	282	539	466	1,618	1,557	265	1,013	5,749
9.	Broughton	4	156	537	1,038	1,571	814	259	310	4,689
10.	St. Stephen's	12	401	720	832	1,010	550	296	692	4,513
11.	St. Andrew's	22	799	692	369	289	93	63	447	2,774
12.	St. Giles	30	1,027	1,501	614	731	131	58	179	4,271
13.	Dalry	1	196	1,985	1,929	989	38	9	62	5,209
14.	George Square	12	442	955	838	1,207	503	231	313	4,501
15.	St. Leonard's	21	818	1,733	842	614	231	112	102	4,473
16.	Portobello	5	134	757	1,011	3,264	2,234	890	676	8,971
17.	South Leith	4	258	1,440	2,181	2,600	463	140	178	7,264
18.	North Leith	4	627	1,686	989	520	105	28	87	4,046
19.	West Leith	12	574	1,049	638	759	795	441	723	4,991
20.	Central Leith . . . . .	...	254	1,607	633	496	110	17	50	3,167
21.	Liberton	29	328	1,575	1,094	373	355	264	561	4,579
22.	Colinton	11	162	309	180	265	698	410	828	2,863
23.	Corstorphine and Cramond	15	117	464	252	1,806	2,344	1,002	1,027	7,027
Total		273	7,859	23,253	20,358	30,207	17,682	7,619	13,930	121,181
Edinburgh Area		198	5,539	15,123	14,391	23,388	12,812	5,317	10,476	87,244
Leith Area		20	1,713	5,782	4,441	4,375	1,473	626	1,038	19,468
Suburban Area		55	607	2,348	1,526	2,444	3,397	1,676	2,416	14,469

Housing Schemes.—The information in the following table, which has been supplied by the City Chamberlain, shows the number of houses completed by the Corporation up to the period ending 28th December, 1936. Of the total houses, 9,203 or 73 per cent. were of the three-apartment type.

	Number of Apartments.												Totals.	
	One.		Two.		Three.		Four.		Five.					
	Number.	Per Cent.	Number.	Per Cent.	Number	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.		
Improvement and Reconstruction Schemes—														
Non-State-Aided	248	44	338	56	2	...	...	...	...	...	...	608	4.81
State-Aided : 1923 Act . .	28	1	818	27	2,097	69	87	3	...	...	...	3,030	23.94
1930 „ . . . .	...	...	26	2	962	91	76	7	...	...	...	1,064	8.41
Provision of New Houses—														
Non-State-Aided	73	30	137	56	22	9	12	5	...	...	...	244	1.93
State-Aided : 1923 Act . .	...	...	18	100	...	...	...	...	...	...	...	18	.14
1924 „ . . . .	...	...	882	14	5,241	82	273	4	...	...	...	6,396	50.54
1919 „ . . . .	...	...	77	6	879	68	214	16	125	10	...	1,295	10.23
Totals	369	3	2,296	18	9,203	73	662	5	125	1	...	12,655	100.0	

From 1st January, 1919, to 28th December, 1936, plans have been passed by the Dean of Guild Court for the erection of 36,900 houses.

VITAL STATISTICS.

In the accompanying table a decennial survey of the increase which has taken place in the population of the City from 1861 to 1921, and a yearly survey from the latter date onwards, are given. The births and deaths with the rates per 1000 of the population are also shown, together with the infantile mortality rates per 1000 live births.

Year.	Population.	Deaths.	Rate per 1000.	Births.	Rate per 1000.	Infantile Mortality.
1861	170,444	3,946	23.1	5,694	33.4	135
1871	196,979	5,484	27.8	6,874	34.8	151
1881	228,346	4,308	18.8	7,360	32.2	128
1891	261,225	5,257	20.1	7,382	28.2	138
1901	316,921	5,633	17.7	7,920	24.9	143
1911	320,829	4,652	14.4	6,507	20.8	115
*1921	420,264	6,048	14.4	9,028	21.5	96
1922	422,112	6,447	15.3	8,772	20.8	91
1923	423,956	5,875	13.9	8,662	20.4	82
1924	425,802	6,312	14.8	8,404	19.7	89
1925	427,664	6,138	14.4	7,843	18.3	96
1926	429,535	5,710	13.3	7,926	18.5	80
1927	431,413	6,066	14.1	7,621	17.7	80
1928	433,299	5,872	13.6	7,420	17.1	75
1929	435,195	6,442	14.8	7,304	16.8	80
1930	437,098	6,038	13.8	7,307	16.7	82
1931	443,042	5,726	12.9	7,164	16.2	69
1932	447,800	6,032	13.5	6,960	15.5	73
1933	452,773	5,964	13.2	6,835	15.1	66
1934	457,099	5,873	12.8	7,188	15.7	62
1935	460,877	6,132	13.3	7,037	15.3	70
1936	464,139	6,226	13.4	7,391	15.9	68

* City boundaries extended.

MARRIAGES.

There was an increase in the number of marriages registered during the year as compared with 1935, the figure being 4,478 as against 4,291. The marriage rate was equivalent to 9.6 per 1,000 of the population, and excepting Aberdeen, where the rate was 9.7, it was the highest among the large centres of population in Scotland.

The number of marriages registered in each quarter of the year was as follows :—

1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total.
856	1,067	1,580	975	4,478

BIRTHS.

During the year 8,249 births were registered in the City. From this total, there were deducted 963 which occurred in maternity hospitals and nursing homes to parents whose residence was outwith Edinburgh. In the course of the year there were 105 births to Edinburgh citizens residing temporarily in other parts of Scotland and these were included in the City records.

After these adjustments the births allocated to the City numbered 7,391—3,759 males and 3,632 females—representing a birth-rate of 15·9 per 1,000. This number is 354 more than in the previous year when the birth-rate was 15·3 per 1,000.

The number of births and the birth-rates in the various municipal wards will be found in the table on page 5, while the following statement shows the corrected births registered in each quarter of the year :—

Quarter.	Total Births.	Legitimate.	Illegitimate.	Percentage of Illegitimate to Total Births.
1st . . .	1,893	1,786	107	5·7
2nd . . .	2,010	1,858	152	7·6
3rd . . .	1,757	1,655	102	5·8
4th . . .	1,731	1,628	103	5·9
Totals .	7,391	6,927	464	6·3

DEATHS AND DEATH RATES.

Deaths from all causes numbered 6,226—3,017 males and 3,209 females—equivalent to a general death-rate of 13·4 per 1,000 of the estimated population. In the previous year there were 6,132 deaths and a death-rate of 13·3.

Of the total deaths, 505 were of infants under one year, representing an infantile mortality rate of 68 per 1,000 live births. The figures for 1935 were 490 and 70 respectively.

The following table shows the allocation of the deaths in each quarter of the year, together with the equivalent death-rates :—

Quarter.	Number of Deaths.	Death-rates per 1,000.
1st . . .	1,979	17·1
2nd . . .	1,462	12·7
3rd . . .	1,272	10·9
4th . . .	1,513	13·0
Total . .	6,226	13·4

On page 5 the distribution of the deaths throughout the wards in the City, together with the death-rates applicable to each, are shown.

Table showing the Population, etc., also the Births and Deaths in each Ward during 1936.

WARD.	Population.	Area in Acres.	Density of Population per Acre.	BIRTHS.		INFANTILE MORTALITY.		*EPIDEMIC DISEASES.		DEATHS.	
				Number.	Rate per 1000.	Deaths.	Rate per 1000 Births.	Number.	Rate per 1000.	Number.	Rate per 1000.
Calton	20,534	228	90.1	291	14.2	12	41	2	.1	257	12.5
Canongate	19,217	965	19.9	358	18.6	31	87	7	.4	255	13.3
Newington	20,690	891	23.2	215	10.4	7	33	3	.1	279	13.5
Morningside	21,660	1,558	15.9	174	8.0	5	29	2	.1	339	15.7
Merchiston	20,090	677	29.7	202	10.1	4	20	3	.1	307	15.3
Gorgie	30,388	676	45.0	539	17.7	39	72	7	.2	298	9.8
Haymarket	18,796	959	19.6	186	9.9	14	75	4	.2	228	12.1
St. Bernard's	19,767	1,250	15.8	378	19.1	27	71	2	.1	280	14.2
Broughton	16,922	472	35.9	256	15.1	17	66	4	.2	224	13.2
St. Stephen's	15,970	190	84.1	278	17.4	26	94	9	.6	273	17.1
St. Andrew's	10,013	206	48.6	160	16.0	11	69	5	.5	135	13.5
St. Giles	17,726	266	66.6	361	20.4	28	78	6	.3	295	16.6
Dalry	19,843	187	106.1	409	20.6	25	61	6	.3	241	12.1
George Square	17,823	248	71.8	273	15.3	17	62	5	.3	306	17.2
St. Leonard's	16,860	104	162.1	307	18.2	24	78	9	.5	261	15.5
Portobello	35,344	2,200	16.1	574	16.2	49	85	16	.5	430	12.2
South Leith	28,764	819	35.1	416	14.5	29	70	7	.2	353	12.3
North Leith	17,806	218	81.7	372	20.9	17	46	8	.4	246	13.9
West Leith	18,512	462	40.1	244	13.2	18	98	3	.2	246	13.3
Central Leith	13,239	142	93.2	249	18.8	18	72	4	.3	183	13.8
Liberton	18,728	6,339	3.0	471	25.1	49	104	11	.6	238	12.7
Colinton	9,815	5,602	1.8	107	10.9	9	84	1	.1	118	12.0
Corstorphine and Craigmond	22,472	8,067	2.8	389	17.3	15	39	3	.0	232	10.3
Institutions	11,404	...	...	145	...	7	...	3	...	197	...
Military Quarters	1,756	...	...	37	...	1	...	...	...	3	...
Totals	464,139	32,526	14.3	7,391	15.9	505	68	128	.3	6,226	13.4

* Includes Enteric Fever Measles, Scarlet Fever, Whooping Cough, Diphtheria, and Diarrhoea and Enteritis under 2 years.

NOTE.—The Ward populations have been adjusted by deducting the population resident in the principal institutions and military quarters. Births and deaths occurring in institutions are allocated to Wards, except in cases where a permanent domicile cannot be established.

Table showing the number of Deaths (including Deaths transferred from other districts) and the Death-rates per 1000 of the Population during 1936 from all causes and from certain specified causes ; also the Population, the number of Deaths and the Death-rates per 1000, at all ages and certain age-periods.

	Annual Death-rate per 1000	All Ages	Under 1 Year	1 and under 5 Years	Total 5 Years	5 and under 10 Years	10 and under 15 Years	15 and under 25 Years	25 and under 35 Years	35 and under 45 Years	45 and under 55 Years	55 and under 65 Years	65 and under 75 Years	75 Years and upwards	Total above 5 Years
Age Distribution of Population	...	464,139	6,941	27,539	34,480	37,273	33,515	85,222	73,967	61,076	57,312	45,682	25,888	9,724	429,659
Deaths from all Causes	...	6,226	505	148	653	60	47	180	238	342	625	1,050	1,501	1,530	5,573
Annual Death-rate per 1,000	13.4	13.4	72.8	5.4	18.9	1.6	1.4	2.1	3.2	5.6	10.9	23.0	58.0	157.3	13.0
Enteric Fever	-00	3	...	...	...	...	1	...	...	...	...	2	...	...	3
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox	...	...	15	25	40	...	...	1	...	...	...	...	...	...	...
Measles	-08	41	...	...	...	3	...	...	...	...	...	...	...	...	...
Scarlet Fever	-00	3	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough	-04	22	11	11	22	8	4	...	...	...	...	...	...	...	...
Diphtheria and Croup	-05	25	11	11	12	...	...	...	...	...	...	...	...	...	...
Influenza	-12	60	3	1	4	...	...	3	4	2	15	11	11	10	13
Erysipelas	-03	16	5	2	7	...	...	1	...	...	...	...	...	...	9
Encephalitis	-04	19	...	...	...	...	...	...	...	...	...	...	...	...	...
Lethargica	-01	9	3	2	5	1	1	...	...	...	...	...	...	...	18
Cerebro-Spinal Meningitis	-01	287	1	2	2	7	2	56	2	46	53	37	30	3	285
Tuberculosis of Respiratory System	-06	32	1	13	14	...	...	...	...	...	...	...	...	...	18
Tuberculous Meningitis	-03	14	1	2	3	...	...	...	...	...	...	...	...	...	11
Tuberculosis of Intestines and Peritoneum	-05	25	1	...	1	1	1	2	8	3	2	3	1	1	24
Other Tuberculous Disease	-03	809	1	...	1	1	1	2	7	38	124	242	236	157	809
Malignant Disease	-174	17	...	...	...	3	4	2	1	1	3	1	...	2	17
Rheumatic Fever	-03	16	5	3	...	...	2	...	...	...	...	...	...	...	8
Meningitis	-03	608	...	...	8	...	...	...	2	12	36	103	216	238	608
Cerebral Haemorrhage, Embolism, Thrombosis	-131	129	17	4	21	4	1	6	11	16	22	17	24	7	108
Other Nervous Diseases	-28	1,317	...	...	1	1	1	9	25	47	114	253	437	429	1,316
Heart Disease	-283	164	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases of Circulatory System	-35	339	15	4	19	1	1	4	1	13	9	23	57	69	164
Bronchitis	-73	339	15	4	19	1	1	4	1	13	9	23	57	69	320
Pneumonia (all forms)	-73	454	91	37	128	5	2	13	24	31	39	43	90	144	326
Other Diseases of Respiratory System	-98	107	8	3	11	1	1	2	6	11	19	20	19	31	96
Gastric and Duodenal Ulcer	-15	73	...	...	...	...	...	3	6	10	13	20	14	7	73
Gastric and Enteritis	-11	55	31	3	34	...	...	2	2	3	4	1	4	5	21
Diarrhoea and Enteritis	-08	37	...	2	2	1	3	5	3	3	9	6	2	3	35
Appendicitis	-08	37	...	2	2	1	3	5	3	3	9	6	2	3	35
Diseases of Liver and Gall Bladder	-12	59	1	...	...	...	...	2	...	...	...	...	...	...	...
Other Diseases of Digestive System	-22	103	14	3	17	1	1	2	...	5	15	17	20	7	58
Nephritis—Acute and Chronic	-35	164	...	1	...	2	...	2	8	12	21	36	49	20	86
Other Genito-Urinary Diseases	-26	123	3	2	5	...	2	2	2	9	10	21	35	33	163
Puerperal Sepsis	-03	14	...	...	...	...	...	3	9	2	...	...	...	...	14
Other Diseases associated with Childbirth	-05	27	...	...	...	...	...	3	12	9	...	...	...	...	27
Diseases of Early Infancy and Malformations	-54	254	246	5	251	1	1	6	...	...	...	...	...	...	3
Violent Deaths	-65	303	12	3	15	7	3	29	24	30	47	38	43	67	288
All Other Causes	-107	498	19	9	28	8	12	12	19	19	47	63	95	195	470

The accompanying details extracted from the Registrar-General's preliminary statement for 1936 allow a comparison to be made of the death-rate in Edinburgh with those of other large centres of population in Scotland.

	Rate per 1000 of Population.		Rate per 1000 of Population.
Glasgow	14.7	Paisley	13.1
Edinburgh	13.4	Greenock	13.7
Dundee	14.2	Motherwell and Wishaw	12.4
Aberdeen	12.7	Clydebank	11.5
SCOTLAND		13.4	

Ward Mortality.—In comparing the ward mortalities, it is found that the highest death-rates occur in localities associated with congestion of population, unsatisfactory housing, and faulty environment.

In the Edinburgh area the highest general death-rate was returned for George Square ward, viz., 17.2 per 1,000 of the population estimated to be resident in the ward. The rate for pulmonary tuberculosis was also high, being 1.1 per 1,000, as compared with .6 for the City as a whole. The infantile mortality rate of 62 deaths per 1,000 live births was, however, satisfactory and compares favourably with the figure for the City, which was 68.

St. Stephen's, another old town ward, returned a general death-rate of 17.1 per 1,000, and an infantile mortality rate of 94 per 1,000 live births.

The general death-rate for St. Giles ward was 16.6 per 1,000, and the infantile mortality rate 78. There were 20 deaths from pulmonary tuberculosis, representing a death-rate of 1.1 per 1,000, as compared with .6 for the whole City.

As is usually the case, the general death-rate in the residential ward of Morningside was relatively high, due in some measure to the fact that a large percentage of elderly and retired persons reside in this district. Of the deaths allocated to the ward 62 per cent. referred to persons over the age of 65 years. The infantile mortality rate was 29 per 1,000 births.

St. Leonard's ward returned a general death-rate of 15.5 and an infantile mortality rate of 78. Deaths from pulmonary tuberculosis numbered 19 and were equivalent to a death-rate of 1.1 per 1,000 of the ward population. For many years this ward occupied an unenviable position so far as mortality statistics were concerned, but as a result of the extensive slum clearance schemes undertaken in the district, there has been a very marked improvement.

In Gorgie ward the general death-rate (9.8) was the lowest returned for the City. The birth-rate was 17.7 and the infantile mortality 72. Twenty deaths from pulmonary tuberculosis were registered and the death-rate from this cause was .7 per 1,000 of the ward population. Included in this ward, which has a population of 30,388, is the extensive new housing area at Stenhouse, and for seven successive years the general death-rate has been the lowest of all the City wards.

The general death-rates for the four Leith wards compared favourably with that for the City as a whole. The other rates were also favourable.

For the suburban ward of Liberton the satisfactory general death-rate of 12·7 was returned. This ward embraces the new housing area at Niddrie Mains and the mining village of Newcraighall. During the year there were 471 children born, and 49 deaths of infants under one year, representing an infantile mortality rate of 104 per 1,000 births, as compared with the City figure of 68.

In Colinton and Corstorphine and Cramond wards, the general death-rates were 12·0 and 10·3 per 1,000 respectively.

A table showing the principal statistics in each of the twenty-three municipal wards will be found on page 5.

CAUSES OF DEATH.

The table on page 6 shows the principal causes of death classified according to disease groups and age periods.

Principal Epidemic Diseases.—Enteric fever, measles, scarlet fever, whooping cough, diphtheria, and diarrhoea and enteritis in children under 2 years of age, are allocated to this group.

Deaths from these diseases numbered 128 as compared with 118 in the previous year and an annual average of 141 for the five years 1931-1935. Measles accounted for 41 deaths and whooping cough for 22, as compared with 11 and 37 respectively in 1935.

Information regarding the notification of the diseases in this group will be found under the heading "Infectious Diseases" on page 11, while the number of deaths and the death-rates per 1,000 of the population in each municipal ward appear on page 5.

Influenza.—There was no excessive prevalence of influenza during the year and only in 9 cases was it certified as the sole cause of death. In another 51 instances, influenza was stated to have been a contributory cause. Of these latter deaths, 31 were complicated with pneumonia, 5 with bronchitis, and the remainder with various other causes.

Tuberculosis.—Deaths from pulmonary tuberculosis numbered 287 and from non-pulmonary tuberculosis 71—a total of 358. The death-rate from all forms of the disease was equivalent to ·8 per 1,000 of the estimated population. In the previous year there were 335 deaths and the rate was ·7 per 1,000.

The Tuberculosis Officer in his report on page 20 deals more fully with the subject of tuberculosis and the work of his Department during the year.

Cancer.—Deaths from malignant disease show a slight increase, the number for 1936 being 809 as against 806 in the previous year, and an annual average of 785 for the five years 1931-1935. Males numbered 346 and females 463, and the death-rate was equivalent to 174 per 100,000 of the estimated population. Of the total deaths, 65 per cent. were of persons over the age of 60 years.

A large proportion of the cases related to the alimentary tract, *e.g.*, stomach and œsophagus 211, intestines and rectum 137, liver and gall bladder 47 and pancreas 32.

Malignant disease of the female genital organs was the cause of 73 deaths, while in 79 instances the female breast was affected.

The table on page 9 shows the deaths classified according to age, sex, and the organ or region affected.

Diseases of the Nervous System.—The deaths due to diseases of the nervous system numbered 753—302 males and 451 females. Of these, 608 were classified as cerebral hæmorrhage, embolism and thrombosis. There were 15 deaths ascribed to general paralysis of the insane and 12 to locomotor ataxy. Meningitis, other than tuberculous or cerebro-spinal, accounted for 16 deaths, while epilepsy was stated to be the cause in 19 instances. Of the total deaths in the nervous group, 485 or 64 per cent. referred to persons over the age of 65 years.

Diseases of the Circulatory System.—Of the 1,481 deaths from circulatory diseases, 1,317 were attributed to diseases of the heart. Arterio-sclerosis, gangrene and other diseases of the blood vessels were the certified causes of the other 164 deaths in this group. Sixty-seven per cent. of the total deaths were of persons over 65 years.

Diseases of the Respiratory System.—The number of deaths allocated to the respiratory group, excluding those associated with influenza, was 900, compared with 820 in 1935. The principal causes were pneumonia and bronchitis, which together accounted for 793 deaths, including 147 children under 5 years of age, of whom 106 were infants in their first year. Forty-seven per cent. of the total respiratory deaths occurred in persons over the age of 65 years.

Diseases of the Digestive System.—Deaths from diseases of the digestive system numbered 293. This figure does not include 34 deaths from diarrhœa and enteritis in children under the age of two years, which are assigned to the epidemic diseases group. Gastric and duodenal ulcer caused 73 deaths, non-malignant diseases of the liver and gall bladder 59, and appendicitis 37.

Diseases of the Genito-Urinary System.—Acute and chronic nephritis were the certified causes of 164 of the 287 deaths from diseases of the genito-urinary system. Diseases of the prostate were responsible for 69 deaths, while 54 were due to various other conditions.

Deaths by Violence.—Included in this group were 71 suicidal deaths—44 males and 27 females. In a further 232 instances death was due to motor accidents, falls and other forms of violence.

INFECTIOUS DISEASES.

The various diseases falling to be dealt with under this heading are as follows :—

(a) Diseases Specified in the Infectious Disease (Notification) Act, 1889, and Diseases Notifiable in Terms of Regulations made under Section 78 of the Public Health (Scotland) Act, 1897.

(b) Measles and Whooping Cough (first case under 5 years of age, in each household) notifiable under Local Provisions.

The following table shows the number of notifications for each month of the year :

Disease.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Diphtheria and Membranous Croup	23	27	29	16	26	11	22	14	27	39	69	71	374
Erysipelas	26	25	24	20	25	16	21	12	18	18	26	22	253
Scarlet Fever	100	106	111	94	137	122	63	47	68	86	66	83	1,083
Typhoid Fever . . . . .	...	1	...	...	3	7	3	5	3	...	...	3	25
Puerperal Fever	11	10	14	9	14	12	10	9	14	8	12	21	144
Puerperal Pyrexia	5	2	9	3	10	3	9	13	2	10	5	17	88
Cerebro-spinal Fever	2	2	2	4	4	2	1	...	...	...	2	...	19
Infective Jaundice . . . . .	...	...	...	1	...	...	...	...	...	...	...	...	1
Tuberculosis, Pulmonary	47	36	42	55	55	41	33	38	34	35	40	37	493
Tuberculosis, other forms	10	14	17	24	31	26	27	21	19	12	15	26	242
Ophthalmia Neonatorum . . . . .	...	8	9	5	6	13	12	12	9	1	8	9	92
Malaria	1	1	1	...	2	...	...	...	...	4	...	2	11
Dysentery	5	6	7	1	12	2	2	4	10	16	20	89	89
Acute Primary Pneumonia	78	104	56	40	45	43	26	16	25	26	42	46	547
Acute Influenzal Pneumonia	5	8	5	1	2	5	1	...	...	1	1	2	31
Measles	629	617	607	332	171	70	22	17	13	4	6	3	2,491
Whooping Cough	19	38	9	16	24	33	50	113	84	75	131	212	804
Poliomyelitis . . . . .	...	1	...	...	...	...	1	...	15	18	11	...	46
Polio-encephalitis . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica . . . . .	...	...	...	...	1	1	1	...	...	...	...	1	4
Totals	961	1,006	942	621	568	407	304	321	335	347	450	575	6,837

Typhoid Fever.—During the year, 25 cases of typhoid fever were reported to the Department. Of these, 5 were "B" Typhosus infections, 19 Paratyphoid "B" and one Paratyphoid "A." The latter case was that of a visitor who became ill during a voyage from India, and it was assumed that he had been infected abroad. In 9 other instances the disease was contracted outwith the City.

Three cases occurred in a ward of an Edinburgh Institution. The infection was traced to a patient who had been admitted from a country district. This patient died.

From a household in the south side of the City 3 cases were notified, one of whom was found to be a carrier of the disease. One of the contacts died.

There were 98 specimens of fæces and urine taken from contacts for routine examinations and of these, 3 were positive to "B" Paratyphosus B.

Five deaths representing 20 per cent. of the notified cases occurred. Two of the deaths referred to patients from outlying districts who died in the City Hospital where they had been removed for treatment.

Diphtheria.—There were 374 notifications of diphtheria received during the year as compared with 308 in 1935 and 546 in 1934.

The disease was most prevalent during the last four months of the year, when 206 cases were notified. During this period the type of diphtheria was more severe than in the earlier part of the year, quite a number of true "gravis" infections occurring.

There were 26 deaths and the mortality rate was equivalent to 7.0 per cent. of the cases.

Scarlet Fever.—The prevalent type of scarlet fever has been extremely mild.

There were 1,083 cases reported during the year, as compared with 1,511 in 1935, and only 5 deaths, representing a death-rate of .46 per cent. of the notifications. Two of the deaths were country cases.

Cerebro-Spinal Meningitis.—The cases of cerebro-spinal meningitis intimated numbered 19, the same as for the previous year.

There were 13 deaths and the case mortality was 68 per cent. Four of the deaths referred to children from outlying districts who had been brought to the Royal Hospital for Sick Children or other institutions and died in the City Hospital, where they had been removed for treatment.

Of the 9 City deaths, 5 children under five years of age succumbed to the disease.

Erysipelas.—There were 253 persons reported to be suffering from erysipelas, and of these, 16 died. Seven of the deaths referred to children under 5 years and six to persons over 65 years of age.

The percentage of deaths to cases was 6.3.

Puerperal Fever and Pyrexia.—Notifications of puerperal fever numbered 144 and puerperal pyrexia 88, as compared with 97 and 49 respectively in the previous year.

Reference is made to notifications and deaths from these diseases in the report by the Child Welfare Medical Officer, which appears on page 57.

Ophthalmia Neonatorum.—Ninety-two intimations of ophthalmia neonatorum were received during the year.

In the reports by the Child Welfare and Venereal Diseases Medical Officers on pages 57 and 80, detailed accounts are given concerning these cases.

Measles and Whooping Cough.—Only the first case under 5 years of age in each household is notifiable, and during the year, 2,491 cases of measles and 804 cases of whooping cough were reported.

Measles assumes a higher prevalence in alternate years, and this has been the experience in Edinburgh during the last decade. The increased incidence was first noted during the month of December, 1935, when 223 cases were intimated. In January, 1936, there were 629, in February 617, and in March 607. The numbers subsequently decreased rapidly, but it was not until June that the normal level was reached.

The epidemic ran much the same course as the severe outbreak of 1932. At the beginning, the greatest number of cases occurred in Dalry and Gorgie wards, then spread to Portobello and South and North Leith. Liberton ward then became involved and a number of notifications were received from St. Bernard's, St. Stephen's, St. Giles and St. Leonard's. The epidemic terminated in May, the districts in which the disease still lingered being Portobello, Liberton and Newington.

There were 41 deaths, most of which were due to pulmonary complications. With one exception all the deaths were of children under 5 years of age.

There were 804 "first" cases of whooping cough notified to the Department during the year and 25 deaths, all of which referred to children under the age of 5 years.

Tuberculosis.—The notifications of respiratory tuberculosis numbered 493 and the deaths 287, compared with 437 and 265 respectively in 1935. The death-rate was equal to '61 per 1,000 of the estimated population.

In the non-pulmonary forms of tuberculosis the notifications were 242, as compared with 233 for the previous year. The total deaths from non-pulmonary tuberculosis were 71, an increase of one over the figure for 1935.

A detailed account of the work of the Tuberculosis Department is given by the Tuberculosis Officer on page 20.

Notifications of and deaths from the principal epidemic diseases throughout the wards in the City are shown in the table on page 14, while on page 15 a statement is given regarding the type of house occupied by the infected persons.

Table showing the Infectious Disease Notifications and Deaths (except Phthisis) in each Ward during 1936.

No.	WARD	ENTERIC FEVER.		PUERPERAL FEVER.		DIPHTHERIA.		SCARLET FEVER.		ERYSIPELAS.		CEREBRO-SPINAL FEVER.		MEASLES.		WHOOPING COUGH.		PNEUMONIA (all Forms).	
		Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.
1	Calton	1	...	3	...	10	...	16	...	12	...	2	...	95	1	19	1	27	14
2	Canongate	...	...	...	1	8	...	26	...	11	...	...	...	66	4	39	2	27	26
3	Newington	3	...	2	...	8	...	74	...	7	...	...	...	78	1	9	...	40	15
4	Morningside	...	...	...	...	7	...	81	...	7	...	...	...	26	...	5	...	10	18
5	Merchiston	...	...	...	...	16	...	55	...	7	...	...	...	37	...	8	...	9	21
6	Gorgie	...	...	4	...	26	...	118	...	23	...	...	...	196	...	84	3	30	19
7	Haymarket	...	...	7	...	19	...	45	...	...	...	...	...	44	...	16	...	4	15
8	St. Bernard's	3	...	...	...	14	...	76	...	5	...	...	...	130	...	20	...	14	17
9	Broughton	...	...	6	...	2	...	31	...	10	...	...	...	65	1	28	...	18	22
10	St. Stephen's	1	...	2	...	2	...	36	...	7	...	1	...	104	3	30	2	16	23
11	St. Andrew's	...	...	5	...	3	...	19	...	8	...	...	...	83	2	13	1	11	13
12	St. Giles	...	...	...	...	10	...	14	...	10	...	...	...	102	1	43	4	35	27
13	Dairy	...	...	4	...	16	...	64	...	10	...	2	...	72	2	37	...	15	17
14	George Square	1	...	8	...	11	...	28	...	4	...	2	...	63	1	17	...	23	21
15	St. Leonard's	3	...	5	...	8	...	20	...	8	...	1	...	103	3	40	1	30	19
16	Portobello	...	...	4	...	41	...	44	...	9	...	1	...	281	5	86	3	46	36
17	South Leith	1	...	3	...	36	...	54	...	10	...	1	...	171	3	58	1	41	20
18	North Leith	1	...	9	...	25	...	16	...	10	...	1	...	141	3	35	...	31	17
19	West Leith	...	...	2	...	7	...	15	...	15	...	1	...	91	...	14	...	14	11
20	Central Leith	...	...	5	...	17	...	21	...	5	...	...	...	91	...	41	1	21	16
21	Liberton	...	...	10	...	33	...	56	...	15	...	...	...	233	5	31	...	36	33
22	Colinton	1	...	2	...	1	...	23	...	2	...	3	...	16	...	15	1	8	1
23	Corstorphine and Cramond	...	...	5	...	4	...	50	...	9	...	1	...	43	...	18	...	12	14
	Institutions	7	...	34	...	42	...	101	...	37	...	5	...	160	3	98	1	56	19
	Military Quarters	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...
	Totals	25	*5	144	+25	374	‡26	1,083	|| 5	253	16	19	§13	2,491	41	804	25	578	454
	Case- and Death-rates (per 1000 population) for year	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Case- and Death-rates (per 1000 population) for year 1935	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

The Deaths in this Table represent those actually occurring among the cases notified although inking place after 31st December.

* Includes 2 deaths transferred out

† Includes 1 death transferred out.

‡ Includes 1 death transferred out.

|| Includes 2 deaths transferred out.

§ Includes 10 deaths transferred out.

Table showing the Notifications of Infectious Diseases, classified according to size of house in which the infected persons resided.

DISEASE	1 Apartment.		2 Apartments.		3 Apartments.		4 Apartments.		5 Apartments.		Over 5 Apartments.		Institutions and Military Quarters.		Total Cases.
	Number of Cases.	Percentage to Total Cases.	Number of Cases.	Percentage to Total Cases.	Number of Cases.	Percentage to Total Cases.	Number of Cases.	Percentage to Total Cases.	Number of Cases.	Percentage to Total Cases.	Number of Cases.	Percentage to Total Cases.	Number of Cases.	Percentage to Total Cases.	
Diphtheria	13	3.5	84	22.5	126	33.7	71	19.0	16	4.2	22	5.9	42	11.2	374
Erysipelas	7	2.8	58	23.0	67	26.5	44	17.3	24	9.5	16	6.3	37	14.6	253
Scarlet Fever	28	2.6	233	21.5	294	27.1	175	16.2	91	8.4	161	14.9	101	9.3	1,083
Typhoid Fever . . . . .	...	...	1	4.0	7	28.0	5	20.0	...	...	5	20.0	7	28.0	25
Puerperal Fever and Puerperal Pyrexia	4	1.7	77	33.2	66	28.5	30	12.9	5	2.2	4	1.7	46	19.8	232
Cerebro-spinal Meningitis . . . . .	...	...	4	21.0	4	21.0	2	10.5	...	...	4	21.0	5	26.3	19
Totals	52	2.6	457	23.0	564	28.4	327	16.5	136	6.8	212	10.7	238	12.0	1,986

MOTOR AMBULANCE SERVICES.

Four motor ambulances are maintained at the City Hospital for the removal of cases of infectious disease. The drivers live at the hospital and the machines are available day and night.

An additional ambulance, garaged in a central part of the City, is fully employed with admissions to the General Hospitals, making transfers from one hospital to another, and conveying patients to the Royal Victoria Dispensary for X-ray examinations and other forms of treatment.

Transport to the General Hospitals is also undertaken by an ambulance directed by the Public Assistance Department. In addition, this machine conveys patients to Bangour Mental Hospital and Gogarburn Certified Institution. To meet emergencies the Public Health and the Public Assistance Departments have a working arrangement to call on each other for ambulance services when required.

Five police ambulances are at the call of the citizens generally for the removal of accident cases to the Royal Infirmary and other hospitals.

The St. Andrew's Ambulance Association have 3 ambulances, which are sent on request to convey patients to nursing homes and other institutions.

DISINFECTION.

The disinfection of houses, etc., is carried out by a special staff attached to the Public Health Department.

The bedding and infected articles of clothing are conveyed to the disinfecting station in motor vans and there treated under high pressure steam or formaldehyde gas.

A statement is given below showing the number of dwelling houses disinfected during the last three years :—

	1934.		1935.		1936.	
	Number.	Apart-ments.	Number.	Apart-ments.	Number.	Apart-ments.
Dwelling-houses, etc. :—						
After Tuberculous Disease	872	1,234	834	1,094	805	1,120
„ other	2,423	3,262	2,264	2,766	2,287	3,062

The number of articles dealt with at the disinfecting station during the year is given in the following table :—

Description.	No. of Articles.		Description.	No. of Articles.	
	After Tuberculous Disease.	After Other Diseases.		After Tuberculous Disease.	After Other Diseases.
Mattresses and Palliasses .	470	2,788	Body Clothes . . .	822	18,947
Blankets, Sheets, Quilts, etc. .	1,235	12,587	Carpets and Rugs . . .	11	643
Beds, Pillows, Bolsters, etc. .	1,018	5,934	Miscellaneous . . .	205	2,122
Curtains, Table Covers, Wraps, etc. .	13	504	Destroyed by request .	914	398
Table Napery, Toilet Covers, Towels, etc. . .	12	1,987	Totals . . .	4,700	45,910

Straw Packing.—The fumigation of straw packing used in connection with the export of certain goods is necessary to comply with regulations issued by various foreign countries. This work is carried out at the Northern General Hospital, and during the year, 13 consignments were dealt with and the necessary certificates granted.

Cleansing of Persons.—Facilities for personal cleansing are provided at the disinfecting station. Of the 1,006 persons who availed themselves of the opportunity to attend for baths and disinfection of their clothing, 92 adults and 551 children suffered from scabies. A further 358 adults and 5 children were treated for verminous conditions.

RECEPTION HOUSE.

There was no smallpox or other disease calling for the quarantine of contacts in the Reception House.

INTERMENTS.

(In terms of Section 69, Public Health (Scotland) Act, 1897).

The Department was applied to in 187 instances by relatives or friends of deceased persons, who represented that they were unable to meet the expenses of burial. On investigation 5 of the applications were refused and 9 were subsequently withdrawn for various reasons. In the remaining 173 cases the Department made arrangements for interment at a total cost of £303 17s. The sum of £30 16s. 2d. was recovered from relatives or from insurance companies.

The applications were distributed as follows :—

	Adults.	Children.	Total.
Public	20	7	27
Eastern General Hospital	45	...	45
Western General Hospital	9	48	57
Northern General Hospital	7	1	8
City Hospital	11	6	17
Gogarburn Certified Institution	3	...	3
Royal Infirmary	11	...	11
Other Institutions	3	2	5
	<u>109</u>	<u>64</u>	<u>173</u>

HOSPITAL EXPENDITURE.

The following table shows the cost per occupied bed in the hospitals under the control of the Public Health Department. The particulars apply in each case to the financial year to 28th May, 1936, and are based on the gross ordinary expenditure, excluding loan charges :—

Institution.	Daily Average Number of Occupied Beds.	Gross Ordinary Expenditure Year to 28th May 1936.	Cost per Occupied Bed per Week.
City Hospital	438	£46,335	40 5
Western General Hospital	248	30,404	46 10
Northern General Hospital	251	18,424	25 1
Eastern General Hospital	365	29,524	30 11
Royal Victoria Hospital	72	6,957	36 6
Royal Victoria Farm Colony	12	1,453	44 11
Victoria Park House	21	1,626	28 6
Bangour Mental Hospital	1,031	64,010	23 9
Gogarburn Certified Institution	408	22,823	21 10

PUBLIC HEALTH EXPENDITURE.

The increase in Public Health Expenditure consequent on the introduction of new schemes from time to time is shown in the following table.

Year.		Gross Expenditure.	Revenue.	Net Expenditure.
1909-10		£35,159	£699	£34,459
1910-11		34,869	718	34,150
1911-12		35,072	780	34,291
1912-13	T.B. Scheme begun.	37,618	2,690	34,927
1913-14		46,094	14,548	31,546
1914-15		56,768	18,716	38,051
1915-16		56,827	12,997	43,829
1916-17	C.W. Scheme begun.	58,323	23,216	35,107
1917-18		75,198	30,552	44,645
1918-19	V.D. Scheme begun.	99,563	43,029	56,533
1919-20		130,877	49,138	81,738
1920-21	Amalgamation with Leith.	210,875	89,098	121,777
1921-22		184,315	68,450	115,865
1922-23		146,395	67,477	78,917
1923-24		149,873	47,554	102,319
1924-25		156,155	48,949	107,206
1925-26		156,919	54,185	102,734
1926-27		157,895	56,439	101,455
1927-28		* 172,763	56,999	115,764
1928-29		* 177,008	60,512	116,496
1929-30		* 182,136	62,559	119,577
1930-31	Includes General Hospitals	* 394,088	48,070	346,018
1931-32	and Mental Institutions.	* 354,499	48,205	306,294
1932-33		* 381,293	82,596	298,697
1933-34		* 377,444	76,733	300,711
1934-35		* 374,943	75,704	299,239
1935-36		* 403,676	82,208	321,468

* Interest and Debt Charges included.

HEALTH PROPAGANDA.

The principal item of health propaganda carried out during 1936 was the City's Third Health and Hygiene Exhibition held in the Waverley Market from 18th March to 4th April. The opening ceremony was performed by the Earl of Rosebery, with Lord Provost L. S. Gumley in the Chair. During its sixteen days' run, the Exhibition was visited by 68,188 persons, including 4,627 school children who were admitted free by arrangement with the City Education Officer. Several headmasters, impressed with the educational value of the Exhibition, asked to be allowed to bring additional parties of pupils, and this privilege was readily granted.

Attractive exhibits were made of the activities of all the branches of the Public Health Service, including the Child Welfare, Tuberculosis and Venereal Diseases Schemes, the School Medical Service and the Sanitary and Veterinary Departments. From 3 till 10 o'clock daily, an almost continuous display of propaganda films was given in a specially erected cinema hall. One of the films described the operations of the Sanitary Department; another showed the activities of the City Transport Department. Skilled members of the staffs were in attendance at all the stands to explain the exhibits to the public, and in connection with the Child Welfare display demonstrations of the cooking of simple meals were given.

A great deal of valuable propaganda was accomplished, not only by the Public Health Department, but by the Police, the Lighting and Cleansing Department, the Fire Brigade and other City services which are all the better for securing the co-operation and goodwill of the citizens. In addition to a generous distribution of literature, the whole edition of 10,000 guide books was sold, and valuable support was given in the daily press. By these means, health propaganda was carried into the homes of the citizens.

Among the stage performances a series of tableaux depicting the life of Florence Nightingale, with the cast filled by City Hospital nurses and male members of the Public Health Department, will be remembered as an artistic production.

The numbers attending were lower than at the two previous Exhibitions, the comparative figures being—1928 (ten days), 92,536; 1930 (sixteen days), 131,585; and 1936 (sixteen days), 68,188. While it was apparent that a health exhibition was no longer a novelty, it was agreed that the enterprise did much to keep the health conscience active and to maintain a good understanding between the Department and the public. The expenses, amounting to £3,859, were met from stand rents and admission charges, and when all accounts had been paid, there remained a surplus of £96 13s. 9d.

TUBERCULOSIS.

REPORT BY TUBERCULOSIS OFFICER.

During the year the total number of pulmonary tuberculosis notifications received was 493, which shows an increase of 56 over the number for the preceding year, and represents an incidence rate of 1·1 as compared with 0·9 for 1935. The highest notification incidence was recorded in St. Giles Ward (1·5 per 1000), George Square and St. Stephen's each having a rate of 1·4 per 1000. The lowest rates were found in the less overcrowded and congested areas of Haymarket, Colinton, and Corstorphine and Cramond, which wards showed rates of 0·4 per 1,000. Thirty-three per cent. of the cases notified were between the ages of 20 and 30, and in that age group the females numbered 90, whilst the males totalled 72.

There were 22 more deaths from pulmonary tuberculosis than in the previous year, the actual number being 287, as compared with 265. Males accounted for 164 of that number and females 123. This represents an increase in the death-rate from ·57 in 1935 to ·61. The average death-rate for the ten years 1926-1935 was ·74. A study of the statistical table on page 25 reveals a progressively downward tendency of the mortality figures in tuberculosis, as a result of the continuous efforts which are being made to control and eradicate the disease.

As is the case in all communities for which reliable figures are available, the smallest number of deaths take place between the ages of 5 and 15 years, *i.e.*, roughly school age. Thereafter, there is noted a relatively sharp rise in the death-rate from pulmonary tuberculosis, and this is especially marked in the case of the female sex. A review of the table on page 24 shows that more women died of consumption between the ages of 20 and 35 than at any other age period. This grim fact is the melancholy experience of tuberculosis workers in almost all countries for which reliable statistics are available. Numerous and varied are the explanations which have been offered, from time to time, to account for this tragic occurrence, but none of them completely explains the facts in all cases, and up till the present, medical science has failed to find an adequate explanation for this deplorable loss of life. It is, however, definitely established that the resistance to tuberculosis in the female undergoes, in some obscure way, rather a sharp fall at the time of puberty and remains comparatively enfeebled during the entire active reproductive period. This all-important diminution in the natural resistance is fundamentally the explanation of the marked mortality from pulmonary tuberculosis in the female during that age period, but what the precise factors are which determine this enfeeblement of resistance are not yet fully known.

It will be noted that the highest death-rates occurred in St. Giles (1·1), George Square (1·1), St. Leonards (1·1), Central Leith (1·1) and Canongate (1·0),—wards which in parts, reveal congestion and associated bad housing features.

A disquieting feature is revealed from a study of the table on page 24 (deaths in relation to notifications). This shows that 30 per cent. of the deaths took place within a period of six months of notification. The importance of early diagnosis and immediate notification have been insisted upon *ad nauseam*, and it is everywhere acknowledged

that the prospects of ultimate recovery and cure are enhanced just in proportion as treatment is instituted early, yet it is much to be deplored that so many of the cases brought to the notice of the Department by notification, are found to be already far advanced in disease and beyond all hope of cure. The resources of the Department are made readily available to the general practitioner to assist him establish a correct diagnosis at the earliest possible moment. Last year, arrangements were concluded with Professor Mackie, Professor in Bacteriology at the University, to make cultures, as a routine procedure, in all sputum samples which give negative findings on direct microscopic examination. An experimental series of observations do reveal the important fact that by cultural methods a positive result is obtained in sputum from cases of pulmonary tuberculosis in some 10 per cent. of cases which were negative to the ordinary methods of examination. By adopting this procedure and making it available, as it now is, to the general practitioners, it was hoped to bring to our notice cases which might otherwise have been missed until serious inroads had been made by the disease. The regrettable fact must be admitted that still far too many cases, when first brought under the notice of the Department, are found in an advanced stage of pulmonary tuberculosis. Occasion has been taken in a former report to emphasise the opinion that this is by no means always the fault of the patient, who may have sought advice at the onset of symptoms. There is no lack of evidence to prove that in at least 20 per cent. of the cases found to be in an advanced stage of consumption when first diagnosed, the fault has not been on the part of the victim. This gives added emphasis to the fact, which is so frequently overlooked with disastrous consequences, that the first and most important stage in the diagnosis of pulmonary tuberculosis is to know when to suspect it.

During the past year, in 40 cases, death from tuberculosis of the lungs had actually occurred before the existence of the disease had been made known to the Department.

There were 242 cases of non-pulmonary tuberculosis notified during the year, representing an increase of 9 over the preceding year. As invariably happens in cases of this type of tuberculous disease, the preponderating majority of the cases occur in early childhood and adolescence. The notification incidence of $\cdot 5$ per 1000 remains the same as for the preceding year.

The number of deaths reveals an increase of one over the preceding year and the mortality was practically equal for both sexes—37 females and 34 males. The death-rate is equal to $\cdot 15$ per 1000, and is the same as for the previous year, which was the lowest ever recorded for the City.

At the Royal Victoria Dispensary there was noted an increase of 1,225 attendances over the previous year. During the year 1,458 cases were referred by local practitioners to the Tuberculosis Officer for the purpose of diagnosis or for the consideration of questions regarding treatment. This figure represents an increase of 113 over the preceding year. In addition, home consultations were arranged in 72 cases. Of the total number of the cases which were referred, 1,398 were cases of actual or suspected lung disease, and in the remaining 132, the case was suspected of some other variety of tuberculosis.

A detailed report of the activities carried out in the various tuberculosis institutions is given in the following pages.

It is a genuine pleasure to acknowledge here the able help and willing co-operation which have at all times been extended to me by the assistant physicians, house physicians, nurses of the Tuberculosis Department and the clerical members of the Tuberculosis Staff.

PULMONARY TUBERCULOSIS.

Notifications.—The number of cases of pulmonary tuberculosis reported to the Department during 1936 was 493, representing an incidence rate of 1·1 per 1000 of the estimated population. During the previous year there were 437 notifications and the incidence rate was ·9 per 1000.

In the following table the number of cases intimated annually since 1912, together with the incidence rates, are shown :—

1912	1,255 or 3·9 per 1000	1925	670 or 1·6 per 1000
1913	1,010 or 3·1 ,,	1926	656 or 1·5 ,,
1914	808 or 2·4 ,,	1927	593 or 1·4 ,,
1915	690 or 2·1 ,,	1928	581 or 1·3 ,,
1916	628 or 1·9 ,,	1929	596 or 1·4 ,,
1917	655 or 2·0 ,,	1930	558 or 1·3 ,,
1918	643 or 2·0 ,,	1931	565 or 1·3 ,,
1919	602 or 1·9 ,,	1932	513 or 1·1 ,,
1920	616 or 1·9 ,,	1933	553 or 1·2 ,,
*1921	817 or 1·9 ,,	1934	536 or 1·2 ,,
1922	762 or 1·8 ,,	1935	437 or ·9 ,,
1923	692 or 1·6 ,,	1936	493 or 1·1 ,,
1924	799 or 1·9 ,,		

* City Boundaries extended to include Leith and Suburban Area.

The sex and age distribution of the persons notified during the year are set out in the accompanying table. The ages at which the patients were reported varied from 4 months to 79 years, and the greatest number were notified between the ages of 20 and 30 years. In the age groups up to 35 years the females show a marked predominance, while in the later periods the proportion of males is much greater. A study of the table reveals that tuberculosis takes its heaviest toll of the community between the ages of 15 and 45 years.

Sex.	Under 5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70 and over.	Total.
Male	2	2	3	23	37	35	20	23	16	17	31	24	12	7	6	258
Female	3	1	6	36	52	38	24	15	8	10	9	6	6	16	5	235
Total	5	3	9	59	89	73	44	38	24	27	40	30	18	23	11	493

In the next table, the notifications are arranged according to municipal wards :—

	Notifi- cations.	Rate per 1000.		Notifi- cations.	Rate per 1000.
Calton	22	1.1	George Square	25	1.4
Canongate	21	1.1	St. Leonard's	17	1.0
Newington	19	.9	Portobello	43	1.2
Morningside	13	.6	South Leith	29	1.0
Merchiston	21	1.0	North Leith	24	1.3
Gorgie	30	1.0	West Leith	17	.9
Haymarket	7	.4	Central Leith	24	1.8
St. Bernard's	21	1.1	Liberton	21	1.1
Broughton	21	1.2	Colinton	4	.4
St. Stephen's	22	1.4	Corstorphine and Cramond	9	.4
St. Andrew's	11	1.1	Institutions (other than Sanatoria)	13	...
St. Giles	26	1.5	Military Quarters	7	...
Dalry	26	1.3			

The connection between the overcrowding of houses and the spread of tuberculosis has been emphasised in previous reports. This is borne out by the unsatisfactory figures which are recorded year after year for certain parts of such wards as St. Giles, George Square, St. Stephens, and the older district of the Canongate Ward. In the Leith area the highest incidence rates are generally returned for the North and Central Wards, where much the same conditions are to be found as those prevailing in the Edinburgh wards, to which reference has been made. The removal of much old and unsatisfactory property in the poorer quarters of the City during the past few years, and the consequent transfer of a large proportion of the population to suburban districts have, however, resulted in a marked diminution in the number of cases of tuberculosis from the wards above mentioned.

In the following table the type of house occupied by the infected persons is shown. Sixty-eight per cent. of the sufferers were living in houses of three rooms or less :—

1-roomed house.	2-roomed house.	3-roomed house.	4 rooms and over.	Lodging- Houses.	Institutions, Etc.	Total.
32	174	129	120	17	21	493

Deaths.—The deaths from pulmonary tuberculosis during the year numbered 287, equivalent to a death rate of .61 per 1000 of the estimated population, as compared with .57 per 1000 for the previous year, and an average rate of .74 for the preceding 10 years. The death rate is, none the less, satisfactory, and as the various housing improvement schemes materialise, further reductions in the mortality may be expected.

The number of deaths during 1936, together with the ward death-rates, sex and age are shown herewith :—

WARDS.	Number of Deaths.	Rate per 1000.	Sex.		Age-periods.															
			Male.	Female.	Under 15 years.		15 and under 20 years.		20 and under 25 years.		25 and under 35 years.		35 and under 45 years.		45 and under 55 years.		55 and under 65 years.		65 yrs. and upwards.	
					M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Calton	10	·5	4	6	...	...	1	...	3	1	2	3	1	1	...	...	1	1	2	1
Canongate	19	1·0	10	9	...	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...
Newington	11	·5	5	6	...	...	...	1	...	...	2	2	1	...	...	...	...	...	...	...
Morningside	4	·2	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Merchiston	9	·4	6	3	...	...	...	...	3	...	1	1	...	...	2	1	...	...	...	...
Gorgie	20	·7	13	7	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...
Haymarket	5	·3	2	3	...	...	1	...	1	...	2	3	2	4	...	2	...	...	2	...
St. Bernard's	11	·6	7	4	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...
Broughton	12	·7	4	8	...	...	1	...	...	...	...	...	2	4	2	1	...	...	1	...
St. Stephen's	6	·4	5	1	1	...	...	...	1	...	2	1	...	...	...	...	...	...	1	2
St. Andrew's	9	·9	5	4	...	...	...	...	...	...	...	...	2	...	...	2	...	...	...	...
St. Giles	20	1·1	14	6	...	1	...	...	2	4	1	3	1	2	1	3	1	2	...	...
Dalry	12	·6	5	7	...	1	...	2	...	2	2	1	...	1	1	1	...	3	...	...
George Square	20	1·1	12	8	...	1	...	2	...	2	2	2	1	...	5	...	2	1	2	...
St. Leonard's	19	1·1	12	7	...	1	2	...	1	2	1	3	2	...	4	...	3	1	2	2
Portobello	20	·6	12	8	...	...	2	...	1	1	1	3	2	3	2	1	1	1	...	...
South Leith	15	·5	11	4	...	...	1	1	1	1	1	1	...	...	4	1	1	1	...	...
North Leith	11	·6	6	5	...	...	1	1	1	1	1	2	1	...	1	...	1	1	...	...
West Leith	9	·5	3	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Central Leith	15	1·1	9	6	...	...	...	...	3	...	1	1	3	...	4	2	...	...	1	1
Liberton	10	·5	3	7	...	1	...	1	...	3	...	1	2	2	4	2	...	...	...	...
Colinton	3	·3	1	2	...	1	...	1	...	3	...	...	1	2	1	1	...	...	...	...
Corstorphine and Cramond	9	·4	7	2	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...
Institutions (other than Sanatoria)	8	...	5	3	...	...	1	...	1	...	...	...	3	1	...	1	2	...	...	...
Military Quarters . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	1	3	1	...	1
Totals	287	·6	164	123	1	5	11	9	15	21	26	30	26	20	40	13	28	9	17	16
Edinburgh Area	207	·6	119	88	1	4	8	4	8	16	21	24	18	12	29	7	20	7	14	14
Leith Area	50	·6	29	21	...	...	2	4	6	2	5	3	5	9	3	2	1	2	...	...
Suburban Area	22	·4	11	11	...	1	1	1	1	3	...	1	3	3	2	2	3	1	...	...
Institutions	8	...	5	3	...	...	...	...	...	...	...	...	2	...	...	1	3	1	...	1
Military Quarters . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Deaths in Relation to Notification.—The deaths from pulmonary tuberculosis since 1927 are classified to show the lapse of time between notification and death :—

Year.	Within 1 month.	From 1 to 3 months.	From 3 to 6 months.	From 6 months to 1 year.	From 1 to 2 years.	Over 2 years and under 3.	Over 3 years and under 4.	From 4 years upwards.	Notified after Death.	Total
1927	46	41	28	47	60	30	14	47	68	381
1928	56	41	23	26	47	26	14	51	61	345
1929	53	33	39	36	52	23	11	53	62	362
1930	56	34	26	29	53	14	14	39	68	333
1931	47	33	27	25	43	26	20	50	55	326
1932	38	42	25	28	37	33	7	48	55	313
1933	32	43	29	30	49	36	19	49	35	322
1934	42	34	21	42	38	24	16	38	47	302
1935	25	22	14	26	44	25	19	42	48	265
1936	36	32	19	30	43	22	14	51	40	287

It will be observed that 87 or 30 per cent. of the cases of pulmonary tuberculosis proved fatal within six months after notification, while 40 cases came to the knowledge of the Department after death had actually occurred. The stage at which a case is reported has an all-important bearing on the future treatment, and prognosis of the patient, and it is to be regretted that in so many instances the disease should be so

well established before the Department is made aware of the case. If notification is to be of use in the control and treatment of the disease, it must be made without delay.

In the next table the number of deaths from all forms of tuberculosis which have occurred annually in the City since 1912, together with the death rates per 1000 of the population, are shown :—

DEATHS FROM TUBERCULOSIS, 1912-1936.

Year.	Pulmonary Tuberculosis.			Rate per 1000.	Other Tuberculous Disease.			Rate per 1000.	All Tuberculosis.	
	Deaths.				Deaths.				Deaths.	Rate per 1000.
	Male.	Female.	Total.		Male.	Female.	Total.			
1912	226	180	406	1.3	93	87	180	.6	586	1.9
1913	186	178	364	1.1	84	91	175	.5	539	1.6
1914	213	166	379	1.2	89	101	190	.6	569	1.8
1915	193	179	372	1.2	92	69	161	.5	533	1.7
1916	198	158	356	1.1	81	82	163	.5	519	1.6
1917	201	190	391	1.2	100	84	184	.6	575	1.8
1918	141	180	321	1.0	74	89	163	.5	484	1.5
1919	161	159	320	1.0	70	82	152	.5	472	1.5
1920	161	125	286	.9	69	62	131	.4	417	1.3
* 1921	187	194	381	.9	96	87	183	.4	564	1.3
1922	187	180	367	.9	72	93	165	.4	532	1.3
1923	214	183	397	.9	70	68	138	.3	535	1.2
1924	225	199	424	1.0	73	70	143	.3	567	1.3
1925	215	186	401	1.0	89	76	165	.4	566	1.4
1926	201	155	356	.8	60	66	126	.3	482	1.1
1927	193	188	381	.9	75	55	130	.3	511	1.2
1928	195	150	345	.8	46	57	103	.2	448	1.0
1929	198	164	362	.8	69	43	112	.3	474	1.1
1930	174	159	333	.8	37	53	90	.2	423	1.0
1931	185	141	326	.7	40	45	85	.2	411	.9
1932	170	143	313	.7	47	53	100	.2	413	.9
1933	185	137	322	.7	42	35	77	.2	399	.9
1934	170	132	302	.7	29	51	80	.2	382	.9
1935	151	114	265	.6	39	31	70	.2	335	.8
1936	164	123	287	.6	34	37	71	.2	358	.8

*City Boundaries extended to include Leith and Suburban Area.

The death-rates quoted herewith are extracted from the Registrar-General's preliminary statement for 1936, and enable a comparison to be made with Edinburgh and other large centres of population :—

Town.	Death rate per 1000.		Town.	Death rate per 1000.	
	Pulmonary Tuberculosis.	All forms of Tuberculosis.		Pulmonary Tuberculosis.	All forms of Tuberculosis.
Glasgow . . .	.87	1.14	Paisley . . .	.60	.76
Edinburgh . . .	.61	.76	Greenock . . .	.63	.91
Dundee . . .	.60	.82	Motherwell & Wishaw	.51	.77
Aberdeen . . .	.40	.49	Clydebank . . .	.56	.69

The following summary shows the number of cases reported annually since 1926:

1926	.	.	.	.	433 or 1.0	per 1000
1927	.	.	.	.	359 or .8	"
1928	.	.	.	.	347 or .8	"
1929	.	.	.	.	317 or .7	"
1930	.	.	.	.	295 or .7	"
1931	.	.	.	.	254 or .6	"
1932	.	.	.	.	272 or .7	"
1933	.	.	.	.	243 or .5	"
1934	.	.	.	.	258 or .6	"
1935	.	.	.	.	233 or .5	"
1936	.	.	.	.	242 or .5	"

Sex.	Under 5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70 and over.	Total.
Male . .	31	24	17	8	7	6	3	5	3	4	1	3	1	2	2	117
Female . .	24	23	14	21	9	5	5	8	4	1	5	...	3	2	1	125
Totals . .	55	47	31	29	16	11	8	13	7	5	6	3	4	4	3	242

In the following table, the cases are classified to show the part of the body affected by the disease :—

Glands	71	Joints—	
Abdomen	58	Hip	11
Meninges and Brain	34	Knee	7
Spine	17	Ankle	3
Genito-Urinary	11	Elbow	2
Lupus	8	Shoulder	2
General	5		— 25
	— 204		
Bones (except Spine)—			
Leg	2		
Foot	2		
Hand	2	Others	6
Rib	1		
	— 7	Total	— 242

Deaths.—The deaths from all forms of non-pulmonary tuberculosis numbered 71, and the death-rate, which was equal to $\cdot 15$ per 1000 of the population, was the same as in the previous year. A table on page 25 shows the number of deaths from all forms of tuberculosis together with the death-rates per 1000 of the population from 1912 onwards.

The sex, age at death, and the organ or region affected by the disease are tabulated below :—

Cause of Death.	All Ages.			Age Periods.												75 and over.
	Both Sexes.	Males.	Females.	-1	1-	5-	10-	15-	25-	35-	45-	55-	65-			
Tuberculous Meningitis	32	16	16	1	13	7	2	5	2	1	1	...	...	...
Tuberculosis of Intestines and Peritoneum	14	7	7	1	2	...	1	1	2	3	2	...	1	1		
.. .. . Vertebral Column	2	1	1	...	...	...	...	...	1	...	...	...	1	...
.. .. . Other Bones and Joints	5	1	4	...	...	...	...	...	2	1	1	...	...	1
.. .. . Skin . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...
.. .. . Lymphatic System	1	...	1	...	...	...	...	...	...	...	...	...	1	...
.. .. . Genito-urinary System	7	4	3	...	...	...	...	1	3	1	1	...	1	...
Disseminated Tuberculosis, acute and chronic	10	5	5	1	...	1	1	1	2	...	...	3	1	...
Other Non-Pulmonary Tuberculosis . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	71	34	37	3	15	8	4	8	12	6	5	3	5	2		

INSTITUTIONAL TREATMENT.

The total number of beds provided for the residential treatment of tuberculosis patients at the various municipal hospitals is as follows :—

Royal Victoria Hospital, Pulmonary Tuberculosis	76 beds.
Polton Farm Colony	18 ..
Colinton Mains Hospital	148 ..
.. .. . Non-pulmonary Tuberculosis	73 ..
Total	<u>315 beds.</u>

Royal Victoria Hospital.—The bed accommodation at this Institution is, as far as possible, reserved for the treatment of patients in the early stages of pulmonary tuberculosis. In addition to the essential requirements for treatment, suitable forms of light work, under medical supervision, are provided for the adult patients. There is always a demand for admission to the hospital and the following table shows the number of patients dealt with during the year.

	Remained at 1st January.	Admitted.	Discharged.	Died.	Remaining at 31st December.
Men	37	66	69	2	32
Women	37	63	64	...	36
Children	1	10	5	...	6
Totals	75	139	138	2	74

In the course of the year 138 patients were discharged and two died. Several patients were admitted for "observation" purposes and four of these were ultimately found to be suffering from non-tuberculous conditions.

The next table gives particulars relating to age and sex :—

Sex.	Under 5	5-10	10-15	15-20	20-30	30-40	40-50	50-60	Over 60	Total.
Males	3	6	25	18	8	7	2	69
Females	1	5	13	31	13	2	1	1	67
Totals	1	8	19	56	31	10	8	3	136

The average length of residence of the discharged patients was 205 days.

During the year artificial pneumothorax treatment was employed in 28 patients (15 women and 13 men). In some of the cases it was combined with minor surgical procedures such as temporary paralysis of the phrenic nerve or actual phrenicectomy, whilst in other cases collapse therapy was used in conjunction with the exhibition of gold salts. Extensive use has been made of aurotherapy in one or other of its forms.

The salts most commonly employed have been Sanocrysin, Crisalbine, Allochrysin and Solganol-B. oleosum, and whilst their use has been attended, in some cases, with distinct benefit and improvement in the local and general conditions of the patient, they are not all universally applicable in the treatment of lung tubercle and the extravagant claims which have been made on their behalf, by some observers, have not, unfortunately, been realised. It is felt, however, that, whilst they are not in any degree a specific form of treatment, they do fill a useful therapeutic purpose in certain types and stages of pulmonary tuberculosis. Every opportunity is taken to give a fair and impartial trial to all new forms of treatment which can reasonably be expected to offer any addition to the present methods of therapy already in use, but we have felt constrained to refrain from the extensive employment of some of the bolder methods of major surgical intervention which are urged in some quarters for the treatment of lung tubercle, as the results in that connection have not been encouraging.

Colinton Mains Hospital.—Accommodation is provided at this hospital for the treatment of all forms of tuberculosis, 148 beds being reserved for pulmonary tuberculosis and 73 for non-pulmonary cases.

Pulmonary Tuberculosis.—The majority of the pulmonary cases selected for admission are generally in an advanced stage. In the vast majority of the cases the disease is too well established to permit of permanent cure. In many instances, however, the patients respond wonderfully to treatment and during the year 224 were discharged to their homes greatly improved in health. Visiting nurses attend them there and advice and treatment are given where necessary by the medical staff of the Department.

There were 119 deaths, representing 25 per cent. of those treated in hospital during the year.

The following table shows the number of patients dealt with in the course of the year :—

	Remained at 1st January.	Admitted	Discharged.	Died.	Remaining at 31st December.
Men . .	86	220	135	82	89
Women . .	43	130	88	35	50
Children . .	...	4	1	2	1
Totals .	129	354	224	119	140

The duration of treatment of discharged patients averaged 136 days. Of the 345 patients who died or were discharged, 9 were found to be suffering from diseases other than tuberculosis.

The age and sex of the remaining 334 patients were as under :—

Sex.	Under 5	5-10	10-15	15-20	20-30	30-40	40-50	50-60	Over 60	Total.
Males	2	12	46	38	39	50	25	212
Females	1	17	53	25	9	10	7	122
Totals	3	29	99	63	48	60	32	334

The ever-present and urgent need for more adequate accommodation for the advanced female cases is a constant source of anxiety. When all is said and done the primary motives of the hospital for advanced cases are those of isolation and segregation, and it is much to be deplored that the clamant demands of a persistently heavy waiting list necessitate the premature discharge—often to very unsatisfactory home conditions—of cases who should be retained in hospital. If whole-hearted efforts are to be made and results obtained in preventive measures in tuberculosis, which alone, in the present stage of knowledge, offer definite and sure hope of betterment, then adequate accommodation for the advanced type of case is a prime necessity.

Non-Pulmonary Tuberculosis.—There were 100 cases of non-pulmonary tuberculosis admitted to the hospital during the year, and in 21 or 21 per cent. of these, the disease was located in the spine. In 12 or 12 per cent. of the cases, the hip joint was affected, while 28 or 28 per cent. suffered from abdominal tuberculosis.

The following table shows the number of patients dealt with during the year :—

Sex.	Remained at 1st January.	Admitted.	Discharged.	Died.	Remaining at 31st December.
Males . .	29	53	37	6	39
Females . .	34	47	56	3	22
Totals .	63	100	93	9	61

The sex and age distribution of the patients admitted were :—

Sex.	Under 5	5-10	10-15	15-20	20-30	30-40	40-50	50-60	Over 60	Total.
Males	6	11	5	5	10	6	2	6	2	53
Females	2	4	8	9	12	6	3	...	3	47
Totals	8	15	13	14	22	12	5	6	5	100

The parts affected by the disease in the 100 patients admitted to hospital were as under :—

Part Affected.	Males.	Females.	Part Affected.	Males.	Females.
Abdomen	13	15	Peritonitis . . . .	...	2
Chest	1	...	Sacro Iliac Joint	3	...
Kidney	3	3	Shoulder . . . . .	...	1
Knee . . . . .	...	5	Ankle	2	...
Hip	5	7	Epididymitis	5	...
Spine	12	9	Rib . . . . .	...	1
Cervical Glands	7	3	Salpingitis . . . . .	...	1
Lupus	1	...			
Generalised	1	...	Totals	53	47

Results with regard to patients discharged or dying during the year :—

Parts Affected on Admission.	Males.	Apparently Cured.	Improved.	Not Improved.	Died.	Females.	Apparently Cured.	Improved.	Not Improved.	Died.	Totals.
Abdomen	9	4	3	2	...	20	12	4	2	2	29
Spine and Chest . .	1	...	...	...	1	...	...	...	...	...	1
Spine	5	1	1	1	2	13	8	4	...	1	18
Hip	9	6	3	...	...	9	2	7	...	...	18
Knee	3	3	...	...	...	2	1	1	...	...	5
Cervical Glands . .	6	5	...	1	...	3	1	2	...	...	9
Salpingitis . . . .	...	...	...	...	...	1	1	...	...	...	1
Cerebrum . . . . .	...	...	...	...	...	1	...	1	...	...	1
Ankle	1	1	...	...	...	...	...	...	...	...	1
Rib . . . . .	...	...	...	...	...	1	1	...	...	...	1
Sternum	1	...	...	...	1	...	...	...	...	...	1
Peritonitis	1	...	...	...	1	2	...	2	...	...	3
Sacro Iliac Joint . .	2	...	1	1	...	...	...	...	...	...	2
Kidney	1	...	1	...	...	4	3	...	...	...	5
Epididymitis	2	...	2	...	...	...	...	...	1	...	2
Shoulder	1	...	1	...	...	1	...	1	...	...	2
Generalised	1	...	...	...	1	...	...	...	...	...	2
Mastoid . . . . .	...	...	...	...	...	2	2	...	...	...	1
Totals	43	20	12	5	6	59	31	22	3	3	102

The parts affected by the disease in patients who died, together with the ultimate cause of death, were :—

Part Affected.	Ultimate Cause of Death.
Males—	
Spine	2 Meningitis
Spine and Chest	1 Generalised Miliary T.B.
Sternum	1 Meningitis
Peritonitis	1 Meningitis
Generalised T.B.	1 Meningitis
Females—	
Abdomen	2 Generalised Miliary T.B.
Spine	1 Meningitis

Polton Farm Colony.—During the year 27 patients—18 males and 9 females—were admitted to the Colony, and 28 were discharged. This Institution is situated a few miles from the City and is utilised for the further treatment of pulmonary tuberculosis patients discharged from hospitals under the control of the Department. Only those patients who are likely to benefit by a course of occupational treatment are selected for admission, and in some cases satisfactory results have been noted.

A model piggery and poultry farm are carried on in conjunction with the Colony, in addition to which there is an extensive garden. The patients engage in the work of these undertakings and are supervised by an experienced farm manager.

The expenditure for the upkeep of the Institution and the farm for the year to 15th May, 1936, was £2,869 16s. 11d., while for the same period £1,533 18s. 9d. was realised by the sale of eggs, poultry, pigs and garden produce.

TUBERCULOSIS DISPENSARIES.

The tuberculosis dispensary occupies a most important place in the scheme for the treatment and supervision of the disease. Through this agency it is possible to keep in touch with the notified cases and much valuable curative and educational work is carried on.

The Corporation provide two dispensaries in connection with the scheme, the premises being conveniently situated to meet the requirements of the residents in different districts of the City.

The following table shows the number of attendances during the year at each of the two dispensaries :—

	New Cases.		Old Cases.	
	Edinburgh.	Leith.	Edinburgh.	Leith.
Men . . .	758	80	4,140	841
Women . . .	775	112	4,564	758
Children . . .	821	160	3,957	613
Totals . . .	<u>2,354</u>	<u>352</u>	<u>12,661</u>	<u>2,212</u>

Home Visitation.—The medical and nursing staff paid 12,595 visits to patients at their homes, the numbers in each month being as follows :—

	Insured.	Not Insured.	Total.
January . . .	569	588	1,157
February . . .	572	662	1,234
March . . .	511	659	1,170
April . . .	310	468	778
May . . .	589	661	1,250
June . . .	592	643	1,235
July . . .	466	496	962
August . . .	460	399	849
September . . .	376	339	715
October . . .	564	567	1,131
November . . .	568	522	1,090
December . . .	503	521	1,024
Totals . . .	<u>6,070</u>	<u>6,525</u>	<u>12,595</u>

Artificial Sunlight Treatment.—Clinics are conducted at the Royal Victoria Dispensary for the treatment of tuberculous patients by the Ultra-Violet Rays. Four arc lamps and one mercury vapour lamp are installed, and during the spring and winter months the facilities are fully taken advantage of. Of the 307 patients who attended at the dispensary for irradiations during the year, 258 were medical and 49 surgical cases.

In addition to the dispensary patients, the School Medical Department utilises the clinic for the treatment of children suffering from debility and other illnesses.

The number of exposures made was 12,876.

Extra Nourishment.—This form of domiciliary treatment is granted to patients who, through stress of circumstances, are unable to provide it for themselves. The treatment consists of a regulated supply of special food consisting of milk, fresh eggs and butter. Where improvement in health is noted and if it is considered desirable, an order to continue the supply is given.

Drugs.—The patients attending the dispensaries are supplied with all the necessary drugs and medicines, free of charge.

The Department also expended the sum of £225 7s. 4d. in providing drugs for insured patients on whose behalf 1,801 prescription forms had been issued by medical practitioners. These prescriptions are received from the chemists and by arrangement are sent to the Central Checking Bureau for Scotland, in order to secure uniformity in pricing.

CITY HOSPITAL FOR INFECTIOUS DISEASES.

REPORT BY INTERIM MEDICAL SUPERINTENDENT.

During the year there were 3,599 patients admitted to the wards, of whom 450 were suffering from tuberculosis. The above total includes cases admitted from districts outwith the City boundaries. The greatest number treated in hospital on any one day was 556. The average daily number under treatment was 442.

Health of Staff.—Medical. I regret to report the death in March of Dr. J. W. Brydon, Resident for pulmonary tuberculosis, from meningitis following streptococcal tonsillitis, otitis media and mastoiditis.

Nursing. The following infectious diseases were contracted by members of the nursing staff in the course of their duties:—Measles (4); chickenpox (1); mumps (5); rubella (1); phthisis (3) and scarlet fever (4). Of the four nurses contracting scarlet fever, one had a fairly severe attack soon after arrival and before being actively immunized. The other three, although Dick negative, suffered from mild attacks.

Diphtheria and Scarlet Fever.—The total number of cases of diphtheria is not much higher than that of the previous year. During the latter four months of the year the type of diphtheria was, however, more severe—quite a number of true “gravis” infections occurring. Direct laryngoscopy has again been very useful, both in diagnosis and treatment of laryngeal diphtheria.

The prevalent type of scarlet fever has been extremely mild and although the “infecting” case rate of 1.70 per cent. is rather higher than the previous year, it is not above the average.

Training of Nurses.—Of 37 nurses who completed their training during the year 32 went to various hospitals for general training, 2 became staff nurses, 2 left to be married and one took mental training. Thirty-five nurses passed the State Examination.

Teaching.—Two hundred and ninety-four undergraduates attended clinics at the hospital. These were divided into six sections entailing 90 hours' instruction. Two courses of instruction for the Diploma in Public Health were attended by 15 graduates. Three meetings were held during the summer vacation for post-graduate instruction. Including lectures to the nursing staff, 236 hours were devoted to teaching during the course of the year.

Medical Staff.—Dr. W. T. Benson resigned his appointment as Medical Superintendent in December. His clinical experience has been very valuable to many thousands of patients. He will be missed both as a very able lecturer and as a sound administrator.

Dr. Charles Scott has again rendered very valuable service to the hospital. During the course of the year he performed 5 paracenteses, 33 mastoidectomies and removed tonsils and adenoids in 136 patients. There were several cases of paranasal sinusitis treated by proof puncture and drainage.

Mr Illingworth's willing and expert assistance has been very much appreciated in the diagnosis and treatment of surgical cases. He performed the following operations :—Appendectomy (4) ; drainage of acute osteomyelitis (1) ; abdominal abscess (1) ; axillary abscess (1) ; laparotomy (1).

The Junior Resident Medical Officers have all performed their ward duties in a competent manner and special thanks are due to several ex-residents who have assisted from time to time.

Nursing and General Staff.—I feel that I owe a great deal to the Matron for the assistance she has willingly given me in the administration of the hospital during the period following Dr. Benson's retirement. The hospital has benefited throughout the year from the very loyal co-operation of the Matron and members of the nursing and domestic staff. The various members of the male staff performed their duties in a willing and capable manner.

Balconies, Cubicle Ward, etc.—The balcony extension to Pavilions 2 and 17 are proving very satisfactory for the treatment of septic cases of scarlet fever and chest complications of measles and whooping cough respectively.

The Cubicle Ward again proved its worth. Three hundred and forty-three cases have been admitted, thus simplifying administration in other wards.

Recent Investigations.—Diphtheria Immunization.—During the past two years I have immunized susceptible children in the scarlet fever wards against diphtheria with alum precipitated toxoid. Whilst the investigation is not yet completed, results so far point towards a method using two small injections being more effective than the better known "one-shot immunization."

"Sulphonamide" Preparations.—Clinical trials with these drugs have been carried out in cases of puerperal sepsis, erysipelas, etc. The number of cases is too small to allow a definite opinion being formed, but the results are encouraging enough to warrant further trials.

I append the usual particulars relating to the various infectious diseases treated in the hospital.

DIPHTHERIA.

Of 643 cases admitted to the diphtheria pavilions, 366 were finally diagnosed as suffering from diphtheria. The addition of one diphtheria case erroneously diagnosed as suffering from scarlet fever brings the diphtheria total to 367. Of the remaining 277 patients, 142 were regarded as "carriers" or "bacteriological diphtherias," whilst 135 were found to be suffering from other diseases. The great majority of the 135 misdiagnosed cases were found to be suffering from hæmolytic streptococcal tonsillitis or tonsillo-pharyngitis ; 2 were suffering from measles ; 2 from pneumonia ; 1 from scarlet fever ; 1 from infective mononucleosis ; 1 from agranulocytic angina and 1 from Vincent's angina.

There were 20 deaths ascribed to diphtheria ; 8 patients died within 24 hours of admission to hospital. The fatality rate calculated on actual clinical cases (367) was 5·45 per cent. Excluding laryngeal cases the fatality rate was 4·09 per cent. The mortality rate of 20 laryngeal cases was 25 per cent. Of these 5 deaths two occurred within 24 hours of admission and two were suffering from toxic diphtheria in addition to the laryngeal condition.

In 23 cases admitted to hospital suspected to be suffering from laryngeal diphtheria, the diagnosis was confirmed in 9. Of the remainder, 11 were found to be suffering from a non-diphtheritic catarrhal laryngitis, 2 from measles and laryngitis and 1 from asthma and bronchitis.

	No.	Deaths.
Total number of laryngeal cases of diphtheria	20	5
Cases which did not require operative treatment	9	2
Cases treated by aspiration only	1	...
Cases intubated following aspiration	6	2
Cases tracheotomied	4	1

The paralysis rate, excluding cardiac involvement, was 6·54 per cent.

Serum rashes were noted in 26 cases or 7·08 per cent.

Table showing age and sex of diphtheria patients :—

Age-period.		0-1 years.	1+ years.	2+ years.	3+ years.	4+ years.	5-9 years.	10-14 years.	15-19 years.	20-29 years.	30-39 years.	40-49 years.	50+ years.	Total.
Recovered	Males .	1	2	16	14	18	64	30	8	4	...	...	...	157
	Females .	1	8	7	8	14	67	40	17	21	6	1	...	190
Died	Males .	...	...	...	...	3	4	1	...	...	...	...	...	8
	Females .	...	...	2	3	2	2	2	...	...	...	...	1	12
Total .		2	10	25	25	37	137	73	25	25	6	1	1	367

Diphtheria fatality rate, 5·45 per cent. (20 deaths).

SCARLET FEVER.

During the year there were 1,001 patients admitted to hospital notified as suffering from scarlet fever. The diagnosis was confirmed in 869 cases. The addition of 12 cases notified as measles, 1 as enteric fever and 1 as diphtheria brings the scarlet fever total to 883. This figure includes 10 cases admitted from districts outside the City.

Amongst the 132 cases erroneously diagnosed, the following diseases were noted : —Tonsillitis and/or pharyngitis (56) ; erythema (17) ; nasal catarrh (15) ; measles (14) ; rubella (8) ; pneumonia (3) ; allergic dermatitis (3) ; chickenpox (2) ; urticaria (2) ; enteric fever (2) ; diphtheria (1) ; burns, septicæmia and peritonitis (1) ; adenitis and chronic meningitis (1) ; acute nephritis (1) ; enema rash (1) ; miscarriage (1) ; rheumatic fever (1) ; otitis media (1) ; peritonitis (1) and no disease (1).

The case mortality was 0·22 per cent. (2 deaths).

The following are the principal complications which were noted :—

Adenitis	140 cases or 15·85 per cent.
Otorrhœa	89 „ 10·08 „
Rhinitis (purulent)	63 „ 7·13 „
Arthritis and/or myofibrositis	28 „ 3·17 „
Nephritis	23 „ 2·60 „
Vaginitis	14 „ 1·58 „
Peritonitis	3 „ 0·34 „
Sinusitis	3 „ 0·34 „

Table showing age and sex of scarlet fever patients :—

Age-period.	0-1 yrs.	1+ yrs.	2+ yrs.	3+ yrs.	4+ yrs.	5-9 yrs.	10-14 years.	15-19 years.	20-29 years.	30-39 years.	40-49 years.	50-59 years.	60+ years.	Total
Recovered { Males .	5	12	24	23	43	154	46	24	30	15	5	2	...	383
Recovered { Females .	2	13	29	33	43	194	65	28	58	21	10	1	1	498
Died { Males .	...	...	...	...	...	1	...	...	...	...	...	...	...	1
Died { Females .	...	...	...	...	...	1	...	...	...	...	...	...	...	1
Total .	7	25	53	56	86	350	111	52	88	36	15	3	1	883

Scarlet Fever fatality rate, 0·22 per cent. (2 deaths).

There were 15 alleged “infecting cases” or 1·70 per cent. of the total number of scarlet fever convalescents discharged. Of the 15 alleged “infecting cases” 9 were “clean cases” whilst in hospital. The 15 “infecting cases” were responsible for 22 “return cases.” The return case rate was 2·49 per cent.

Anti-toxic serum was administered to 408 patients (46·20 per cent.).

Tonsils and adenoids were removed in 103 cases (11·66 per cent.).

Mastoidectomy was performed in 21 cases (2·38 per cent.).

Relapse occurred in 7 cases (0·79 per cent.).

MEASLES.

There were 534 cases admitted to the wards notified as suffering from measles. The diagnosis was confirmed in 469 patients. In addition there were 14 cases of measles misdiagnosed as scarlet fever, 2 as diphtheria, 1 as whooping cough and 1 as cerebro-spinal meningitis, bringing the measles total to 487. The corrected diagnosis in 65 patients erroneously notified as measles was as follows :—Rubella (27); scarlet fever (12); erythema (6); broncho-pneumonia (3); catarrh (3); chickenpox (3); impetigo (1); otitis media (1); laryngitis and tracheitis (1); chronic ileo-cæcal intussusception (1); dermatitis (1); enema rash (1); seborrhœa (1); whooping cough (1); pleural effusion (1); bromide rash (1) and acidosis (1).

There were 23 deaths from measles of which 15 resulted from broncho-pneumonia as a complication.

Table showing age and sex of measles patients :—

Age-period.			0-1 years.	1+ years.	2+ years.	3+ years.	4+ years.	5-9 years.	10-14 years.	15-19 years.	20-29 years.	30+ years.	Total.
Recovered	Males	. . .	22	50	39	33	21	36	8	7	6	2	224
	Females	. . .	16	47	27	32	18	36	12	18	27	7	240
Died	Males	. . .	7	6	...	...	...	...	...	...	...	...	13
	Females	. . .	1	5	3	1	...	...	...	...	...	...	10
Total			46	108	69	66	39	72	20	25	33	9	487

Measles fatality rate 4.72 per cent. (23 deaths).

WHOOPIING-COUGH.

The number of cases admitted to the wards notified as suffering from whooping-cough was 206. The diagnosis was confirmed in 198. In addition there was 1 case of whooping-cough erroneously diagnosed as chickenpox and 1 as measles, making a total of 200 patients suffering from whooping-cough. Of the 8 cases misdiagnosed as whooping-cough, 1 was suffering from measles, 1 from lobar pneumonia, 1 from retro-pharyngeal abscess, 1 from catarrh, and in 4 no disease could be found.

There were 16 deaths, of which 8 (50.0 per cent.) were due to broncho-pneumonia.

Table showing age and sex of whooping-cough patients :—

Age-period.			0-1 years.	1+ years.	2+ years.	3+ years.	4+ years.	5-9 years.	10+ years.	Total.
Recovered	Males	. . .	16	23	20	10	9	11	2	91
	Females	. . .	21	18	16	15	4	16	3	93
Died	Males	. . .	...	2	1	...	...	...	...	3
	Females	. . .	6	6	...	...	1	...	...	13
Total			43	49	37	25	14	27	5	200

Whooping-cough fatality rate, 8.00 per cent. (16 deaths).

Prophylaxis.—Several children have been admitted to the diphtheria and scarlet fever wards while incubating whooping-cough. Susceptible contacts have been given large doses of whooping-cough vaccine as a prophylactic. While the results have not been completely successful, no severe attacks and no deaths have occurred amongst these contacts. The employment of large doses of this vaccine has given good results and appears to be worthy of further trials.

PUERPERAL FEVER.

The diagnosis of puerperal sepsis was confirmed in 175 out of 194 cases notified as puerperal fever or puerperal pyrexia. Sixty patients were admitted from districts outwith the City boundaries.

There were 16 deaths from puerperal infection (9·14 per cent.).

Seventy-five patients were primiparæ and one hundred multiparæ. Nine deaths (12·0 per cent.) occurred among the primiparæ and 7 (7·0 per cent.) among the multiparæ.

The corrected diagnosis in 19 cases was as follows :—Mastitis (7) ; miscarriage (4) ; urinary infection (2) ; constipation (1) ; bronchitis (1) ; broncho-pneumonia and streptococcal empyema (1) ; phlebitis (1) ; tuberculosis (1) and lobar pneumonia (1).

The urinary tract was infected in 46 patients (26·29 per cent.) ; *B. coli* was the organism commonly found.

Table showing age of puerperal infection patients :—

Age-period.	15-19 years.	20-29 years.	30-39 years.	40+ years.	Total.
Recovered	6	99	45	9	159
Died	1 (16·6%)	10 (10·1%)	5 (11·1%)	...	16
Total	7	109	50	9	175

Puerperal Infection fatality rate, 9·14 per cent. (16 deaths)

Fifty-eight per cent. of the cases were admitted on or before the third day of illness. The average day of illness on which the patient first received treatment in hospital was the fourth.

Streptococcus hæmolyticus was isolated from the uterus in 77 patients (44·0 per cent.), of whom 10 died (12·9 per cent.).

Streptococcus hæmolyticus was isolated from the blood in 21 patients (12·0 per cent.), of whom 15 died (71·43 per cent.).

ENTERIC FEVER.

Thirty cases were admitted to the hospital notified as suffering from enteric fever. The diagnosis was confirmed in 18 patients. In addition there were two cases of enteric fever erroneously diagnosed as scarlet fever and one as pneumonia, making a total of 21 cases.

The corrected diagnosis in 12 cases was as follows :—Gastro-enteritis (2) ; appendicitis (2) ; infective mononucleosis (1) ; scarlet fever (1) ; toxic confusional insanity (1) ; typhoid carrier (1) ; constipation and sapræmia (1) ; pulmonary tuberculosis (1) ; cholecystitis (1) and mumps (1).

The infecting organism was the bacillus typhosus in 6 cases, and the bacillus paratyphosus B. in 15 cases.

One death occurred in the *B. paratyphosus B.* group.

Table showing age and sex of enteric fever patients :—

Age-period.		0-4 years.	5-9 years.	10-14 years.	15-19 years.	20-29 years.	30-39 years.	40-49 years.	50-59 years.	60+ years.	Total
Recovered	Males	1	1	3	...	4	2	1	...	...	12
	Females	1	1	...	...	2	2	1	1	...	8
Died	Males	...	...	...	...	...	...	...	...	...	...
	Females	...	...	...	...	...	...	...	...	1	1
Total		2	2	3	...	6	4	2	1	1	21

Enteric Fever fatality rate, 4·76 per cent. (1 death).;

ERYSIPELAS.

There were 191 cases admitted to the wards notified as suffering from erysipelas. The diagnosis was confirmed in 147 patients, including 1 case admitted from outside the City.

The corrected diagnosis in the remaining 44 cases was as follows :—Cellulitis (20); dermatitis (8); abscess (6); erythema (3); serum rash (2); impetigo (2); adenitis (1); ethmoiditis (1) and herpes (1).

Ten of the 147 cases died. The actual cause of death in 2 erysipelas patients was streptococcal meningitis and broncho-pneumonia respectively.

The inflammation primarily affected the face in 104 (70·75 per cent.) of the 147 cases. Eight patients (5·44 per cent.) had suffered from a previous attack.

Table showing age and sex of erysipelas patients :—

Age-period.		0-4 years.	5-9 years.	10-19 years.	20-29 years.	30-39 years.	40-49 years.	50-59 years.	60-69 years.	70+ years.	Total.
Recovered	Males	14	4	5	6	5	11	8	9	1	63
	Females	6	4	11	8	13	13	7	9	3	74
Died	Males	...	...	...	1	...	...	1	1	2	5
	Females	4	...	...	...	...	...	...	...	1	5
Total		24	8	16	15	18	24	16	19	7	147

Erysipelas fatality rate, 6·80 per cent. (10 deaths).

CEREBRO-SPINAL MENINGITIS.

Thirty-eight suspected cases of cerebro-spinal fever were admitted to hospital, of which 18 proved to be meningococcal infections.

The following diseases were noted in the group of 20 misdiagnosed cases :—Lobar pneumonia (4); influenzal meningitis (2); tubercular meningitis (2); pneumococcal meningitis (2); benign lymphocytic meningitis (1); measles (1); tonsillitis (1); subarchnoid hæmorrhage (1); bacillary dysentery (1); cerebral embolism (1); erythema (1); cerebral hæmorrhage (1); constipation (1) and encephalitis (1).

Ten cases of meningococcal meningitis died.

The fatality rate for all ages was 55.5 per cent. ; excluding infants 50.0 per cent.

Table showing age and sex of cerebro-spinal meningitis patients :—

Age-period.		Under 1 year.	1-4 years.	5-9 years.	10-14 years.	15-19 years.	20-29 years.	30-39 years.	40-49 years.	50+ years.	Total.
Recovered	{ Males . .	1	1	...	...	...	...	...	...	...	2
	{ Females . .	1	1	2	1	1	...	...	...	...	6
Died	{ Males . .	2	1	...	1	1	...	...	...	1	6
	{ Females . .	2	2	...	...	...	...	...	...	...	4
Total .		6	5	2	2	2	...	...	...	1	18

Cerebro-spinal meningitis fatality rate, 55.5 per cent. (10 deaths).

CHICKENPOX.

Ninety cases notified as chickenpox were admitted to hospital, of which 78 were correctly diagnosed. In addition there were 2 patients suffering from chickenpox misdiagnosed as scarlet fever, and 3 as measles, making a total of 83 cases of varicella.

The following diseases were noted in the misdiagnosed group :—Dermatitis (2) ; impetigo (1) ; septic rash (1) ; purpura (3) ; whooping-cough (1) ; catarrh and herpes (1) and no disease (3).

No deaths occurred.

Table showing age and sex of patients suffering from chickenpox :—

Age-period.		0-1 years.	1+ years.	2+ years.	3+ years.	4+ years.	5-9 years.	10-14 years.	15-19 years.	20-29 years.	30+ years.	Total.
Recovered	{ Males . .	1	18	6	2	7	6	2	1	2	...	45
	{ Females . .	6	14	6	3	1	7	...	...	1	...	38
Died	{ Males . .	...	...	...	...	...	...	...	...	...	...	...
	{ Females . .	...	...	...	...	...	...	...	...	...	...	...
Total .		7	32	12	5	8	13	2	1	3	...	83

BACILLARY DYSENTERY.

Ninety-eight cases were admitted to the wards notified as dysentery. The diagnosis was confirmed in 80. In addition there was one case of dysentery admitted to hospital notified as cerebro-spinal meningitis, bringing the total to 81. Various strains of *B. dysenteriae* Flexner were isolated from 42 cases and *B. dysenteriae* Sonne from 23. There was 1 death from a Flexner infection, and 1 from a Sonne.

Table showing age and sex of bacillary dysentery patients :—

Age-period.		0-1 years.	1+ years.	2+ years.	3+ years.	4+ years.	5-9 years.	10-14 years.	15-19 years.	20-29 years.	30+ years.	Total.
Recovered	Males .	3	6	5	1	5	11	3	...	7	6	47
	Females .	1	1	2	5	2	5	3	4	5	4	32
Died	Males .	...	1	...	...	...	...	...	...	...	...	1
	Females .	1	...	...	...	...	...	...	...	...	...	1
Total .		5	8	7	6	7	16	6	4	12	10	81

Bacillary Dysentery fatality rate, 2.47 per cent. (2 deaths).

EPIDEMIC PAROTITIS.

Sixty-three cases were admitted to hospital notified as suffering from mumps. The diagnosis was confirmed in 55 patients. In addition there was one case of mumps erroneously diagnosed as enteric fever, making a total of 56. There were no deaths.

Table showing age and sex of epidemic parotitis patients :—

Age-period.		0-1 years.	1+ years.	2+ years.	3+ years.	4+ years.	5-9 years.	10-14 years.	15-19 years.	20+ years.	Total.
Recovered	Males .	...	...	4	...	3	9	5	...	2	23
	Females .	...	2	1	...	1	7	6	3	13	33
Died	Males .	...	...	...	...	...	...	...	...	...	...
	Females .	...	...	...	...	...	...	...	...	...	...
Total .		...	2	5	...	4	16	11	3	15	56

RUBELLA.

Eighteen cases of rubella were admitted during the year. The diagnosis was confirmed in 14 patients. In addition there were 8 cases misdiagnosed as scarlet fever and 27 as measles, making a total of 49. No deaths occurred.

Table showing age and sex of rubella patients :—

Age-period.		0-1 years.	1+ years.	2+ years.	3+ years.	4+ years.	5-9 years.	10-14 years.	15-19 years.	20-29 years.	30+ years.	Total.
Recovered	Males .	...	1	...	1	...	5	1	5	11	...	24
	Females .	...	...	...	2	...	6	...	5	10	2	25
Died	Males .	...	...	...	...	...	...	...	...	...	...	...
	Females .	...	...	...	...	...	...	...	...	...	...	...
Total .		...	1	...	3	...	11	1	10	21	2	49

PNEUMONIA.

Sixteen patients were admitted to hospital notified as primary pneumonia or influenzal broncho-pneumonia. The diagnosis was confirmed in 8 cases. In addition there were 4 cases of pneumonia erroneously diagnosed as cerebro-spinal fever, 3 as measles, 3 as scarlet fever, 2 as diphtheria, 2 as puerperal infection and 1 as whooping-cough, making a total of 23 pneumonia patients. Thirteen of the patients, of whom 6 died, were suffering from broncho-pneumonia, and 10, of whom 3 died, from lobar pneumonia. There were 9 deaths.

The following diseases were noted in the misdiagnosed cases :—Influenza (3) ; acute bronchitis (2) ; tuberculosis (1) ; rheumatic fever (1) and enteric fever (1).

Table showing age and sex of pneumonia patients :—

Age-period.		0-4 years.	5-9 years.	10-14 years.	15-19 years.	20-29 years.	30-39 years.	40-49 years.	50-59 years.	60— years.	Total.
Recovered	{ Males .	5	1	...	1	...	...	...	...	...	7
	{ Females .	3	2	...	...	2	...	...	...	...	7
Died	{ Males .	...	...	...	...	1	1	...	2	1	5
	{ Females .	1	1	...	1	1	...	...	...	...	4
Total .		9	4	...	2	4	1	...	2	1	23

Pneumonia fatality rate, 39·12 per cent. (9 deaths).

ANTERIOR POLIOMYELITIS.

Twenty-one cases of anterior poliomyelitis were admitted during the year. The diagnosis was confirmed in each case. There were 2 deaths—a fatality rate of 9·52 per cent.

Table showing age and sex of anterior poliomyelitis patients :—

Age-period.		0-1 years.	1+ years.	2+ years.	3+ years.	4+ years.	5-9 years.	10-14 years.	15-19 years.	Total.
Recovered	{ Males	1	1	3	...	2	2	...	1	10
	{ Females . . . .	...	3	1	1	1	3	...	...	9
Died	{ Males . . . .	...	...	...	...	...	...	...	...	...
	{ Females . . . .	...	...	...	...	...	...	2	...	2
Total		1	4	4	1	3	5	2	1	21

Anterior Poliomyelitis fatality rate, 9·52 per cent. (2 deaths).

Drinker Respirator.—One case of respiratory paralysis following acute anterior poliomyelitis was treated successfully in this apparatus. Although this patient unfortunately developed pneumonia six weeks later, very much valuable knowledge was obtained which should prove useful in future cases of respiratory paralysis.

OTHER DISEASES.

Agranulocytic Angina.—One case notified as diphtheria proved to be agranulocytic angina. This patient died.

Encephalitis Lethargica.—One case of encephalitis lethargica was erroneously notified as suffering from cerebro-spinal meningitis. This patient died.

Infective Mononucleosis.—Two cases of infective mononucleosis were treated in hospital during the year. One was erroneously diagnosed as diphtheria and the other as enteric fever. Both recovered.

Pemphigus Neonatorum.—One child was admitted alleged to be suffering from pemphigus neonatorum. The diagnosis was confirmed and the child recovered.

Vincent's Angina.—One case of Vincent's angina misdiagnosed as diphtheria was treated. The case recovered.

Eighteen post-mortem examinations were performed.

LABORATORY REPORT.

Nature of Specimen.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Total.
Throat swabs for S. Hæmolyticus	129	111	154	350	321	243	260	210	227	284	347	304	2,940
Throat swabs for B. diphtheriæ	124	173	228	421	437	311	301	366	234	398	625	632	4,250
Sputum for Tubercle Bac.	79	112	75	84	80	91	87	89	107	113	120	110	1,147
Cerebro-spinal Fluids	21	16	23	36	45	29	23	19	21	5	26	6	270
Urines	46	39	49	55	46	34	53	37	62	36	32	36	525
Stools	82	18	13	25	40	20	21	30	46	37	40	40	412
Blood for Widal's React. . . . .	...	1	...	3	6	9	3	15	5	...	1	3	46
Blood Cultures for S. Hæmolyticus (examined thrice)	45	39	41	72	59	29	17	21	13	19	41	23	419
Uterine swabs for S. Hæmolyticus	22	17	32	25	32	19	22	15	21	16	12	28	261
General	17	28	18	25	20	25	20	11	23	29	10	22	248
Monthly Total	565	554	633	1,096	1,086	810	807	813	759	937	1,254	1,204	10,518

BACTERIOLOGICAL SERVICES.

The following report is submitted by the Director of Bacteriological Services on the work carried out for the City in the Bacteriology Department of Edinburgh University from January to December, 1935.

ROUTINE BACTERIOLOGICAL EXAMINATIONS

(including examinations for Municipal Hospitals).

	Jan	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total for year
Swabs and cultures from throat, nose and ear examined for <i>B. diphtheriæ</i> :—													
Total	315	353	315	278	391	322	368	256	354	498	601	622	4673
Positive	40	38	42	31	48	38	48	30	37	101	102	96	651
Negative	275	315	273	247	343	284	320	226	317	397	499	526	4022
<i>B. diphtheriæ</i> Virulence tests :—													
Total	16	17	13	8	21	24	16	15	16	52	45	54	297
Positive	6	3	4	2	4	6	9	4	8	12	14	16	88
Negative	10	14	9	6	17	18	7	11	8	40	31	38	209
Throat, nose and ear swabs for general bacteriological examination :—													
Total	75	89	89	59	79	87	94	75	68	86	121	205	1127
Positive : hæmolytic Streptococci	32	40	61	24	27	24	27	31	33	44	60	84	487
Positive : organisms of Vincent's Infection	2	2	1	3	3	1	7	...	...	3	1	...	23
Sputum examined for <i>B. tuberculosis</i> (including cultivation) :—													
Total	173	190	180	175	197	163	105	100	115	185	178	182	1943
Positive	29	19	19	24	26	23	12	16	25	19	38	16	266
Negative	144	171	161	151	171	140	93	84	90	166	140	166	1677
Fæces and urine examined for organisms of enteric fever, dysentery or food-poisoning :—													
Total	33	41	46	62	42	58	58	49	27	170	273	190	1049
Pos.- <i>B. para B.</i> . . . . .	...	...	...	3	3	2	3	4	...	...	1	...	16
Pos.- <i>B. dys. Flexner</i> . . . . .	...	5	4	...	...	...	...	...	1	7	37	7	61
Pos.- <i>B. dys. Sonne</i>	1	...	...	...	1	...	...	...	...	...	3	5	10
Blood for Widal reaction* (including <i>Br. abortus</i> and <i>B. dysenteriæ Flexner</i> agglutination tests) :—													
Total	3	2	16	4	8	12	11	12	5	6	31	6	116
Pos.- <i>B. typh.</i> . . . . .	...	...	...	1	1	...	...	1	1	...	...	1	4
Pos.- <i>B. para B.</i>	1	...	...	...	1	1	5	3	...	...	...	...	11
Pos.- <i>Br. abortus</i> . . . . .	...	...	...	...	...	...	...	...	...	...	1	...	1
Pos.- <i>B. dys. Flexner</i> . . . . .	...	...	12	...	...	...	...	...	...	...	9	...	21
Negative	2	2	4	3	7	11	6	8	4	6	21	5	79
Blood for Wassermann reaction :—													
Total	105	105	109	88	97	137	74	74	51	61	91	93	1085
Positive	12	12	11	7	6	9	6	6	6	2	12	16	105
Negative	93	93	98	81	91	128	68	68	45	59	79	77	980
Syphilis Flocculation test—modified Sachs-Georgi method :—													
Total	102	98	108	85	99	136	71	69	52	58	87	87	1052
Positive	14	13	16	7	5	19	6	11	7	5	6	13	122
Negative	88	85	92	78	94	117	65	58	45	53	81	74	930
Syphilis Flocculation test—Kahn method :—													
Total	105	101	110	89	97	136	74	70	53	61	91	92	1079
Positive	14	12	11	6	5	9	7	10	7	4	7	13	105
Negative	91	89	99	83	92	127	67	60	46	57	84	79	974
Cerebro-spinal fluid for Wassermann reaction													
Total	30	28	35	16	10	8	5	10	7	6	15	11	181
Positive	7	5	6	3	1	2	...	1	...	...	4	2	31
Negative	23	23	29	13	9	6	5	9	7	6	11	9	150

* Some of these were repeat examinations from the same patient.

	Brought forward	12,602
Sputum	General bacteriological examination	86
Sputum	Examined for <i>Pneumococcus</i> (including determination of serological type)	40
Blood	„ for culture (general)	42
Blood	„ for enteric group (<i>B. typhosus</i> —1 pos. ; <i>B. paratyphosus B</i> —8 pos.)	36
Blood	„ for <i>Leptospira icterohæmorrhagiæ</i> (including animal inoculation test)	2
Blood	„ for Malaria parasites	2
Blood	Hæmagglutination test for glandular fever	8 (1 pos.)
Urine	General bacteriological examination	385
Urine and fæces	Examined for <i>B. tuberculosis</i>	326 (12 pos.)
Pus	General bacteriological examination	160
Pus	Examined for <i>B. tuberculosis</i>	69 (7 pos.)
Cerebro-spinal fluid	General bacteriological examination (including examination for tubercle bacillus—1 pos. ; influenza bacillus—1 pos. ; pneumococcus—1 pos.)	19
Cerebro-spinal fluid	For cytological examination, Protein, Globulin and Colloidal Gold tests	173
Naso-pharyngeal swabs	Examined for <i>Meningococcus</i>	12
Vaginal, uterine and urethral swabs and smears	„ for <i>Gonococcus</i>	101 (2 pos.)
Vaginal, uterine and urethral swabs and smears	General bacteriological examination	5
Conjunctival smears	General bacteriological examination	18
Pleural and peritoneal fluids	General bacteriological examination	66
Pleural and peritoneal fluids	Examined for <i>B. tuberculosis</i>	63 (6 pos.)
Fluid from lung puncture	„ for <i>B. influenzae</i>	1 (pos.)
Pleural fluid	„ for <i>Pneumococcus</i>	1 (pos.)
Gastric contents	„ for <i>B. tuberculosis</i>	13 (1 pos.)
Cultures from urine and fæces	Identification of organisms present	35
Autogenous vaccines prepared		14
Rats examined for plague infection*		48
Water specimens for bacteriological examination		102
Milk	Bacterial count	6
Miscellaneous examinations		63
Serum from measles convalescents	Examined for sterility and the Wassermann reaction 3000 c.c.	
	TOTAL	<u>14,498</u>

* These were carcasses of rats caught in docks or on board ships arriving from foreign ports and were examined as a precautionary measure. All were negative.

	Total.	Positive.	Negative.
Throat, nose and ear swabs for B. diphtheriæ	311	34	277
Throat, nose and ear swabs for general bacteriological examination	76
B. diphtheriæ Virulence tests	26	7	19
Throat swabs for Hemolytic streptococci	263	133	130
Throat swabs for Vincent's infection	7	7	...
Sputum for B. tuberculosis	170	22	148
Sputum for general bacteriological examination	56
Sputum for Pneumococcus (including determination of serological type)	39	36	3
Blood for Wassermann reaction	1,003	93	910
Syphilis Flocculation test—modified Sachs-Georgi method	972	112	860
Kahn method	990	96	894
Blood for Widal reaction	28	3	25
Blood for culture	33
Cerebro-spinal fluid for Wassermann reaction	168	27	141
Cerebro-spinal fluid for Cytological examination, Protein, Globulin and Colloidal Gold tests	164
Cerebro-spinal fluid for B. tuberculosis	5	...	5
Pleural, peritoneal and other fluids for general bacteriological examination	54
Pleural fluid for B. tuberculosis	41	2	39
Pus for general bacteriological examination	140
Pus for B. tuberculosis	65	6	59
Fæces and urine for organisms of enteric and dysentery groups	255	11	244
Fæces and urine for B. tuberculosis	304	5	299
Urine for general bacteriological examination	357
Vaginal, uterine and urethral smears for Gonococcus	47	...	47
Miscellaneous	87
Total	5,661		

Western General Hospital	Total	3,489
Eastern General Hospital	Total	1,754
Northern General Hospital	Total	418

	Total.	Positive.	Negative.
Throat, nose and ear swabs for <i>B. diphtheriæ</i>	662	281	381
<i>B. diphtheriæ</i> Virulence tests	243	72	171
Blood for Wassermann reaction	14	3	11
Syphilis Flocculation test—modified Sachs-Georgi method	13	1	12
Kahn method	13	1	12
Blood for Widal reaction	12	6	6
Cerebro-spinal fluid for Cytological examination, Protein, Globulin and Colloidal Gold tests	3
Cerebro-spinal fluid for <i>B. tuberculosis</i>	5	1	4
Pleural fluid for <i>B. tuberculosis</i>	8	2	6
Fæces and urine for organisms of enteric and dysentery groups	185	36	149
Fæces and urine for <i>B. tuberculosis</i>	5	1	4
Miscellaneous	27
Serum from measles convalescents examined for sterility and the Wassermann reaction 3000 c.c.			
Total	1,190		

	Total.	Positive.	Negative.
Sputum for B. tuberculosis	1,061	159	902
Pleural, peritoneal and other fluids for general bacteriological examination	4
Pleural fluid for B. tuberculosis	5	1	4
Miscellaneous	11
Total	1,081		

Bangour Mental Hospital and Gogarburn Institution.

	Total.	Positive.	Negative.
Throat, nose and ear swabs for <i>B. diphtheriæ</i>	45	4	41
Throat, nose and ear swabs for general bacteriological examination	9	...	...
<i>B. diphtheriæ</i> Virulence tests	2	2	...
Throat swabs for Hæmolytic streptococci	13	9	4
Blood for Wassermann reaction	50	8	42
Syphilis Flocculation test—modified Sachs Georgi method	49	9	40
Kahn method	48	6	42
Cerebro-spinal fluid for Wassermann reaction	4	3	1
Cerebro-spinal fluid for Cytological examination, Protein, Globulin and Colloidal Gold tests	3	...	...
Miscellaneous	8	...	...
Total	<u>231</u>		
Bangour Mental Hospital Total	160		
Gogarburn Institution Total	71		
Total Examinations for Municipal Hospitals		8,163	

It may be noted that the amount of bacteriological work carried out for the City Health Department has increased during the year under review, *viz.*, from 10,370 examinations in 1935 to 14,498 in 1936, an increase of 4,128. The increase is mainly in respect of work for the Municipal Hospitals. This work in 1936 consisted of 8,163 examinations as compared with 5,131 in 1935. The increase has been in nearly all types of routine bacteriological investigation.

During the past year all specimens of sputum, pus, etc., examined for the tubercle bacillus which gave a negative result by the usual microscopic method have been submitted to a direct cultivation test. As a result, in a certain proportion of cases in which the microscopic test yielded negative results, the tubercle bacillus has been detected by cultivation. It is proposed to make the latter test a routine one in dealing with suspected tuberculous specimens. It entails considerable additional work in the laboratory, but this is apparently justified by the results. The cultivation test is, of course, supplementary to microscopic examination, and owing to the slow growth of the tubercle bacillus on culture medium the result can only be ascertained after two to four weeks. Data obtained from a systematic inquiry into the cultivation test are dealt with later in this report.

SPECIAL INVESTIGATIONS.

TYPES OF THE DIPHTHERIA BACILLUS.

Recent reports have made it clear that not only do the biological types of the diphtheria bacillus differ in character and proportional incidence from place to place and country to country, but also from time to time in the same area. The factors instrumental in producing these differences and changes, and their epidemiological significance are still undetermined; and a large mass of data gathered over a period of years will be required before they can be elucidated.

The investigation into the types of *B. diphtheriæ* which occur in Edinburgh was begun in 1931-32. During 1936 an attempt has been made to isolate the bacillus from all cultures reported "positive" after the routine examination for *B. diphtheriæ* and from cultures taken from active and carrier cases of diphtheria admitted to the City Infectious Diseases Hospital. The type was then determined by cultural, biochemical and animal tests.

From 1932 until the autumn of 1935, 50-60 per cent. of strains isolated were Type II. ("intermediate"), 15-20 per cent. Type I. ("mitis"), with a negligible proportion of virulent strains producing a "gravis" type of colony. During the period September, 1935 to February, 1936, however, only 26.9 per cent. Type II. strains were isolated, and the proportion of Type IV. strains (non-starch-fermenting, virulent and showing a "gravis" colony) suddenly rose to 25.5 per cent. In the spring and summer months of 1936 there was again a drop in the proportion of Type IV. strains to 10.0 per cent.; Type II. returned to the former level (52.5 per cent.) and Type I. rose to 23.4 per cent. Towards the end of this period, i.e., in August, Type III. (starch-fermenting, virulent strains with a "gravis" colony) began to be regularly encountered, and increased from 3.3 per cent. during the March-August period to 16.8 per cent. of strains isolated from 1st September to 31st December. There was coincidentally a fall in the proportion of Type IV. to 6.7 per cent., of Type I. to 9.0 per cent., and of Type VI. (non-starch-fermenting, avirulent, with the "gravis" colony form). The general character of diphtheria in Edinburgh has been mild for a considerable number of years, but the case incidence during these last months of 1936 has been high as compared with the last months of previous years.

Percentage Incidence of Biological Types of the Diphtheria Bacillus isolated from Active and Carrier Cases of Diphtheria.

	No. of Cases.	Type.						Un- classified.	Cases yielding two or more Types.
		I.	II.	III.	IV.	V.	VI.		
Oct. 1932-Dec. 1933 .	181	20.4	59.1	2.2	1.7	3.9	3.9	7.7	1.1
March-May 1934 . .	76	17.1	57.9	...	4.0	1.3	10.5	7.9	1.3
Oct. 1934-April 1935 .	227	15.9	49.8	...	4.4	1.3	15.9	7.5	5.2
Sept. 1935-February 1936	141	15.6	26.9	5.0	25.5	...	12.8	7.8	6.4
March 1936-Dec. 1936 .	389	13.6	51.2	12.6	8.0	0.5	5.9	4.6	3.6
<hr/>									
March-Aug. 1936 . .	121	23.4	52.5	3.3	10.0	...	5.0	2.5	3.3
Sept.-Dec. 1936 . .	268	9.0	50.4	16.8	6.7	0.7	6.7	5.6	4.1

While the statistical significance of these figures may be open to question at this time, there is no doubt whatever that Type III. which was never encountered during the course of this investigation between March, 1934, and April, 1935, and rarely up to the end of August, 1936, has since been isolated regularly and in a considerable proportion of cases. It is this type which has been prevalent during the severe epidemics of diphtheria reported from different parts of England and the Continent of Europe since 1931; and its appearance in Edinburgh in an appreciable proportion of cases at least raises the question whether increased severity may be expected in this area in the immediate future.

(Helen A. Wright and B. J. Shearer).

REFERENCES :—

- "A note on diphtheria carriers with reference to types of *Corynebacterium diphtheriæ*." By M. H. Christison, H. A. Wright and B. J. Shearer, *Journ., Path. and Bact.* (1936), 42, 345.
- "*Corynebacterium diphtheriæ* in Edinburgh: incidence of types among cases and carriers, 1932-1936." By M. H. Christison, H. A. Wright and B. J. Shearer and R. C. M. Pearson, *Edin. Med. Journ.* (1936), 43, 747.

DIRECT CULTURE IN THE EXAMINATION OF SPUTUM AND OTHER MATERIAL FOR B. TUBERCULOSIS.

The method of direct culture, introduced experimentally in this laboratory during 1935 as an addition to the routine microscopical test in the examination of specimens for tubercle bacilli, has been continued throughout the year. With the object of eliminating organisms other than tubercle bacilli, each specimen was treated with 6 per cent. hydrochloric acid, and thereafter neutralised with 4 per cent. sodium hydroxide, culture media being inoculated with the deposit following centrifugation. The combined microscopic and cultural results on material derived from all sources may be summarised as follows :—

Result	Sputum.	Pleural Fluid.	Pus.	Urine.	C.S.F.	Milk.	Fæces.	Stomach Washings.	Total.	Percentage of all Specimens.
Film— Culture +	401	...	4	5	1	2	2	1	416	12.5
Film— Culture +	142	3	5	7	3	5	...	...	165	5.0
Film— Culture —	9	...	4	...	...	2	...	...	15	0.4
Film— Culture—	2244	57	85	212	19	74	11	8	2710	82.1
	2796	60	98	224	23	83	13	9	3306	100

The comparative value of the two methods of examination is illustrated by the following table of positive results in the case of sputa from cases of pulmonary tuberculosis :—

(a) Positive by film and/or culture examination	.	552	
(b) „ cultural examination only	.	543	98.3% of (a)
(c) „ film examination only	.	410	74.3% of (a)

The inclusion of cultivation as a routine method in the diagnosis of tuberculosis has been fully justified by these findings, film examination alone yielding 74.3 per cent. of the positive results obtained by the combined procedure.

(C. A. Green).

INCIDENCE OF HUMAN AND BOVINE TYPES OF TUBERCLE BACILLI IN PULMONARY TUBERCULOSIS.

Until recent years the part played by the bovine type of tubercle bacillus in the causation of pulmonary tuberculosis, has been considered small and relatively unimportant. In 1935, however, Griffith and Smith reported that bovine strains were isolated from 12.6 per cent. of a series of 103 cases distributed over the North-east of Scotland. Whereas the ultimate criterion of type depends on ascertaining the virulence of a strain in an experimental animal, notably the rabbit, a reasonably accurate type-differentiation can be made by cultural methods. The human type is “eugonic”

and yields a relatively profuse growth on media, whereas the bovine type is "dysgonic" and the growth is sparse. The introduction of cultivation into the routine examination of all sputa (*vide supra*) has therefore rendered possible a preliminary survey of type-incidence. Strains which were not readily typed by this method were subjected to animal virulence tests. In addition the virulence for the rabbit of the seven bovine-type strains encountered was confirmed, while representatives of the "eugonic" human-type strains were all found, as is usually the case, to be relatively avirulent for the same animal. The results were as follows:—

<i>No. of Strains Cultured.</i>	<i>Eugonic (Human) Type.</i>	<i>Dysgonic (Bovine) Type.</i>
543	536	7
	(98·7 per cent.)	(1·3 per cent.)

These findings appear to indicate that there is not any unusual proportion of phthisis due to the bovine type in Edinburgh, the low incidence, 1·3 per cent. of this type, comparing favourably with that of 3·9 per cent. for all Scotland, reported by Griffith and Munro in 1933.

(C. A. Green.)

REFERENCES:—

- Griffith, A. S. and Munro, W. T. (1933). *Lancet*, 1, 399.
Griffith, A. S. and Smith, J. (1935). *Ibid.*, 2, 1339.

TOXINS OF STREPTOCOCCUS HÆMOLYTICUS.

Three notifiable diseases, *viz.*, Scarlet fever, Erysipelas and the majority of cases of Puerperal Fever are caused by the hæmolytic streptococcus. There is as yet no absolute proof to show that one strain of this organism can cause all three diseases or that there are specific differences between strains associated with the different diseases.

It has been established, however, that at least some of the toxic products of hæmolytic streptococci are the same, irrespective of the source of the organism. In view of the importance of the Dick test (an injection of streptococcal exotoxin into the skin to determine susceptibility or otherwise to scarlet fever), skin tests have been largely used to examine the toxic products of this species.

During the past two years an attempt was made to differentiate if possible between the toxic products of different strains of hæmolytic streptococci. The strains were obtained from, and the tests carried out in the City Infectious Diseases Hospital.

Exotoxin and endotoxin were prepared from each of three different strains of hæmolytic streptococcus isolated from scarlet fever, erysipelas and puerperal fever respectively. The results showed that so far as ability to produce a skin reaction was concerned the three exotoxins were identical and the three endotoxins were also identical. The exotoxins could all be neutralised by scarlet fever antitoxin.

(Scott Thomson.)

THE QUESTION OF THE VIRUS ÆTIOLOGY OF RHEUMATIC FEVER.

The ætiology of this disease has received a considerable amount of attention in recent years. Certain observers have concluded that the rheumatic state is the result of allergy to the products of hæmolytic streptococci infecting the upper respiratory passages. The view has also been put forward that the specific ætiological agent is a still unknown infective agent, and the possibility of a causal filterable virus has been considered. Recently claims to have demonstrated specific virus bodies in rheumatic fever have been made by Schlessinger, Signy and Amies.

During the past year the possible virus ætiology of this disease has been inquired into. A number of pathological exudates have been carefully examined for the presence of specific "virus bodies" by the appropriate methods, including agglutination tests with the serum of convalescents and particles separated by high-speed centrifugation (15,000 revolutions per minute). It has been impossible in the cases dealt with to demonstrate such virus bodies. Inoculation experiments with deposits obtained by high-speed centrifugation from joint and pericardial effusion have also yielded negative results.

In view of the recent claims referred to above these results are conflicting and further work is necessary before any statement can be made regarding the question of the virus ætiology of this disease.

(C. E. van Rooyen.)

THE LABORATORY INVESTIGATION OF LYMPHOGRANULOMA INGUINALE.

Work has been carried out on this condition which is a venereal disease characterised by enlarged and suppurating inguinal glands. It has a tendency to spread to the pelvic organs, causing rectal stricture, elephantiasis, etc.

For the confirmation of the clinical diagnosis certain bacteriological methods are available.

(1) *Frei's test*.—This consists in the intracutaneous injection of an "antigen" prepared from the pus of a proved case of the disease by appropriate dilution and heating. In positive cases a papule with surrounding erythema appears within 24 hours. By 48 hours the papule has usually attained a maximum diameter of 2.5 cms. The papule can usually be seen and felt after 7-10 days. In the past difficulty was experienced in keeping available a potent antigen which would not deteriorate. Pus from recent cases has now been desiccated *in vacuo*. Its potency has been proved and thus there is available for use at any time a reliable antigen for the test.

(2) *Animal inoculation.*—Successful transmission was recently obtained following the injection of a guinea pig in the groin. The inguinal glands became markedly swollen. Histologically, characteristic cytoplasmic inclusion bodies were found in histiocyte cells. In common with recent views of others the opinion is expressed that these bodies, although probably specific, do not represent the virus itself.

By such methods cases of lymphogranuloma inguinale are being brought to light with increasing frequency in this country.

(A. J. Rhodes.)

PRESERVATION OF COMPLEMENT FOR THE WASSERMANN REACTION.

Complement (a constituent of normal serum) which is an essential reagent in the Wassermann test is an extremely unstable biological principle and rapidly loses its activity when kept under ordinary conditions, even at 0° - 5° C. It has been customary, for each set of Wassermann tests carried out in one day, to use fresh guinea pig serum as complement. Such samples of complement, however, are by no means uniform either in hæmolytic power or in fixability—the properties on which its use in the Wassermann test depends. This difficulty can be obviated by pooling serum from a considerable number of animals, but for reasons of economy a method of preserving the complement is then required. Various methods have been devised for the purpose, e.g., refrigeration of the serum at -15° to -20° C., desiccation of the serum *in vacuo* and keeping in the dry form, the addition of glycerol, sodium chloride, sodium acetate, etc. Of these methods desiccation has been much used and while very satisfactory preservation is attained in this way, the technique presents some difficulties.

In view of claims made by Sonnenschein (*Ztschr.f.Immunitats.*, 1930, vol. 67, p. 512) who effected preservation of serum-complement by the addition of an equal volume of a solution of 12 per cent. sodium acetate and 4 per cent. boric acid in distilled water, and confirmation in this laboratory of his findings, the method is now being employed as a routine procedure for keeping supplies of pooled complement for the Wassermann reaction. Complement so preserved has proved reliable both as regards its hæmolytic power and fixability over a period of at least two months. The method has the great advantage of being exceedingly simple and free from any technical difficulties. The sodium acetate boric acid solution is mixed in equal volume with the fresh serum which is kept until required in sterile screw-capped bottles at 5° C. (approx.). The presence of the added chemicals does not interfere with the ultimate use of the serum in complement-fixation tests in which, of course, only small amounts of the complement-containing serum are used. Further observations are in progress to determine the longest duration of preservation by this method.

THE INTERPRETATION OF THE WIDAL REACTION.

The Widal reaction provides at best only indirect evidence of enteric infection. It should, therefore, be considered second in importance to cultural methods which provide direct evidence through the isolation and identification of the infecting organism. Of special value is culture from the blood during the first week of the disease. At this stage the infecting organism can generally be isolated in this way, while the Widal reaction may prove negative owing to agglutinins not having yet developed.

Although inferior to the direct method of bacteriological diagnosis, the Widal reaction can supply valuable information if properly interpreted. Before discussing the interpretation of the test some account is necessary of the principles on which it is based and the methods by which it is now carried out.

Organisms of the enteric group are normally flagellated. The body and flagella of these organisms contain two distinct types of antigen, now known as the "O" or body (somatic), and "H" (flagellar), antigens. Treatment of an emulsion of any organism of this group with formalin will interfere with the activity of the "O" antigen alone, while treatment with alcohol or by heat will destroy the "H" antigen alone. These methods are used in preparing "H" and "O" antigens.

Enteric infection is generally caused by a normal flagellated type of organism. Hence there is present in the patient's blood agglutinins for both the "O" and "H" antigens. These may conveniently be called "O" and "H" agglutinins. In a proportion of cases, however, infection may be due to a non-flagellated variant, when only "O" agglutinins are produced. Rarely, for reasons not understood, no "O" agglutinins, but only "H" agglutinins may develop. For these reasons, and because there is evidence that "O" agglutinins develop before "H" agglutinins, it is now a common practice to include both "O" and "H" antigens in the test.

It is important that the reaction should not merely detect the presence of agglutinins but also enable an estimate to be formed of their strength. This is secured by making varying dilutions of the patient's blood serum, say from 1 in 30 to 1 in 960, and testing these against "O" and "H" antigens prepared from organisms of the enteric group. The extent to which the serum can be diluted without the disappearance of agglutinins is called the "end-titre." The greater it is, the more significant is the reaction. It is in terms of the end-titre that the result of the Widal reaction is expressed.

In this laboratory it is now the practice to test quantitatively all sera submitted for the Widal reaction, if the amount suffices, with the following antigens:—*B. typhosus* "O" and "H," *B. paratyphosus A* "H," *B. paratyphosus B* "O" and "H" and *Br. abortus*. The last organism is non-flagellated. It is included in case the disease should be undulant fever.

The interpretation of the test can be considered under two heads; first in those who have not been inoculated, where it is relatively simple, and second in the inoculated, where it is often difficult.

Agglutinins for organisms of the enteric group may be found in the sera of some healthy uninoculated people. Hence they are termed "normal" agglutinins, although it is debatable whether they are really so, or have appeared in response to past or present sub-clinical infection. As a rule they are only present in small amount and the frequency with which they occur varies in different countries. Before the result of the Widal reaction can be taken as indicating enteric, it must be shown that agglutinins are present to an end-titre greater than that likely to be found with serum from a normal person.

The following tables indicate the frequency with which, in Great Britain, normal agglutinins may be found and the titres they may reach.

ROSHER & FIELDEN—LONDON. 1922.

Antigen.	Percentage of sera agglutinating at, or above	
	1 : 20	
<i>B. typhosus</i> "H"	3	
<i>B. paratyphosus</i> A "H" . . . . .	...
<i>B. paratyphosus</i> B "H"	4	

SMITH, MACVIE & NEWBOLD—MANCHESTER. 1930.

Antigen.	Percentage of sera agglutinating at, or above					
	1 : 20	1 : 40	1 : 80	1 : 160	1 : 320	1 : 640
<i>B. typhosus</i> "H"	4.7	2.7	0.7	0.7	...	...
<i>B. paratyphosus</i> A "H" . . . . .	...	...	...	...	...	...
<i>B. paratyphosus</i> B "H"	2.0	1.3	...	...	...	...

GARDNER & STUBBINGTON—ENGLAND. 1932.

Antigen.	Percentage of sera agglutinating at, or above.		
	1 : 25	1 : 50	1 : 100
<i>B. typhosus</i> "O"	38	6	2
<i>B. paratyphosus</i> A "O" . . . . .	...	...	...
<i>B. paratyphosus</i> B "O"	12	2	...

BEATTIE & ELLIOT—EDINBURGH. 1937.

Antigen.	Percentage of sera agglutinating at, or above.					
	1 : 20	1 : 40	1 : 80	1 : 160	1 : 320	1 : 640
<i>B. typhosus</i> "O"	13	4	...	...	...	...
<i>B. typhosus</i> "H" . . . . .	...	...	...	...	...	...
<i>B. paratyphosus</i> A "H" . . . . .	...	...	...	...	...	...
<i>B. paratyphosus</i> B "O"	34	17	9	...	...	...
<i>B. paratyphosus</i> B "H" . . . . .	...	...	...	...	...	...

A consideration of the results obtained with "H" antigens shows that in this country agglutination even in as low a dilution as 1 in 20 may justify a strong suspicion of enteric infection in an uninoculated person. In the small series of sera tested in Edinburgh none gave agglutination in this titre. 4.7 per cent. was the highest proportion found to do so in other places in this country. An agglutination titre of 1 in 80 or over renders it highly probable that the patient is suffering from enteric, while a titre of 1 in 320 makes the diagnosis almost certain. When "H" agglutinins are

developed the diagnosis of enteric infection by the Widal reaction is not, as a rule, difficult.

Unfortunately in some cases, probably about one quarter, they fail to appear. Reliance has then to be placed on the presence of "O" agglutinins. It will be seen that these are present in the sera of healthy uninoculated people more frequently, and in larger amounts than are "H" agglutinins. Hence a higher titre must be demanded before a diagnosis can be made. This should be at least 1 in 100. In many cases of enteric such a titre is not reached. Hence diagnosis by the Widal reaction may be impossible.

There are other difficulties in the interpretation of the test. In man, infection with an organism of the enteric group gives rise to the production of agglutinins not only for that organism but also for related organisms. As a rule the agglutinins for the infecting organism are present to a higher titre, but this is not always so. Furthermore, infections with allied organisms of the *Salmonella* or food poisoning group cause the appearance of agglutinins for organisms of the enteric group. The clinical symptoms of the diseases are generally sufficiently distinct to prevent confusion arising from this source, but not always, for at times organisms of the *Salmonella* group may give rise to a continued fever.

Diagnosis of enteric fever by means of the Widal reaction in the inoculated presents a special and often difficult problem. Inoculation gives rise to the production of agglutinins just as does infection and it is often impossible to say whether the agglutinins demonstrated are due to past inoculation or present infection.

The difficulty is greatest soon after inoculation when agglutinins are present in large amount. These agglutinins, however, may persist for considerable periods. In a recent study it was found that "H" agglutinins might quite commonly be found in a titre of 1 in 320 two years or more after inoculation. The titres for the "O" agglutinins were lower but it was not uncommon to find them in a titre of 1 in 80 two years after inoculation.

It has been claimed that vaccination differs from infection in that it produces only "H" agglutinins and no "O" agglutinins. On this basis it has been suggested that diagnosis in the case of the inoculated should rest on the presence or absence of "O" agglutinins. Subsequent work, however, renders it probable that the agglutinin response to inoculation does not differ from that to infection.

In the majority of cases the only way in which a diagnosis can be reached by the use of the Widal reaction in the case of inoculated persons is by carrying out repeated tests at short intervals during the course of the illness. A regular rise in the agglutination titre for one of the enteric group of organisms would indicate infection with that organism.

The diagnosis can generally be arrived at more simply and speedily by cultural methods, among which may be included culture of the clot from the specimen submitted for the Widal test.

It should be emphasised that the difficulties in the interpretation of the Widal reaction are much increased when the bacteriologist is supplied with inadequate information about the patient. In every case he should be told at what stage in the course of the disease the sample was taken ; whether the patient had been vaccinated or not ; the result of other investigations, if any have been done ; and the main clinical features of the illness. Nor should the importance of attempting to obtain direct evidence of the nature of the infection by culture from the blood, fæces, or, if these do not succeed, from the urine, be forgotten.

(*C. P. Beattie.*)

The Bacteriological Services have been carried out under the direction of Professor T. J. Mackie.

The members of the departmental staff who took part in the work during 1936 were :—Dr. C. A. Green, Lecturer in charge of laboratory for Local Authority Bacteriological Services ; Dr. C. P. Beattie, Dr. A. Haddow, Dr. Scott Thomson, Lecturers ; Dr. Rhodes, Assistant ; Mr R. Farmer and Mr A. Bailey, Technicians.

Voluntary assistance in special investigations was given by Dr. C. E. van Rooyen, Halley Stewart Research Fellow and Lecturer ; Dr. Helen A. Wright, Assistant ; and Miss Barbara J. Shearer, B.Sc.

MATERNITY AND CHILD WELFARE.

REPORT BY MATERNITY AND CHILD WELFARE MEDICAL OFFICER.

The following is a report of the work carried on under the Maternity and Child Welfare Scheme for the year 1936. The various statistical tables have been grouped together at the end of the report, reference numbers to each being noted under the appropriate headings. The various activities of the Department are referred to in sequence, starting with the ante-natal supervision of expectant mothers.

Ante-Natal Supervision (Table 1).

During the year ante-natal clinics were started at two new centres—one in the Stenhouse housing area, which was opened on the 29th February, and one in the Gorgie district, which was started a week later. Both these clinics have been put under the clinical charge of a member of the staff of the Royal Maternity Hospital.

The attendances at the 12 centres during the year numbered 29,056—an increase of 1,312 compared with the previous year. In addition to their ordinary routine visits which include many ante-natal cases, the health visitors paid 3,235 special visits to expectant mothers in their own homes, an increase of 258 over the previous year.

Post-Natal Supervision (Table 2).

These clinics for the medical examination of women recently confined, continue to develop and play a very important part in the prevention of much chronic ill health. The number of attendances has shown a steady increase each year since their inception. During the year 3,487 attendances were registered—an increase of 607 over the previous year.

Midwives Act (Table 3).

The number of midwives intimating their intention to practise in the City is a very small one. Only 17 midwives registered locally during the year, compared with 19 a year ago and 21 in 1934. The number of births attended by them forms a small proportion of the total births occurring in the City—namely, 314 or 3·6 per cent. This shows a decrease of 37 compared with the previous year, when the figure was 351 or 4·2 per cent. of the total births in the City.

An analysis of these 314 births shows that (1) 13 were still-born infants or 4·1 per cent. of the cases attended and 3·1 per cent. of the total notified in the City. (2) Seven died within the first 10 days of life or 3·5 per cent. of the total 197 deaths for the City which took place within 10 days of birth. Comparable figures for 1935 were 6 deaths or 2·5 per cent. of the total 237 deaths. (3) Three were notified cases of ophthalmia neonatorum—an identical number compared with the previous year. Midwives called in the assistance of general practitioners in 12 more cases than in the previous year,

viz., 48 compared with 36 cases in 1935. There were no deaths of mothers in the present year. During the previous year 2 mothers attended by midwives died.

The passing of the new Maternity Services (Scotland) Bill, next year, will, no doubt, bring about some changes in the relationship of midwives to the Local Authority, but it is too soon yet to speculate as to the way in which these changes will be best brought about and how they will affect present conditions.

Maternity Homes Act, 1928.

The number of Maternity Institutions or Homes registered with the Local Authority on the 1st January was 36. During the year no new Homes were added to the register nor were any given up, thus there were 36 Homes still under supervision at the close of the year.

Puerperal Fever and Pyrexia (Tables 4 to 9).

More cases of puerperal fever and pyrexia—namely, 232—were notified in 1936—93 of the former and 139 of the latter—an increase of 26 and 60 respectively, as compared with the figures for 1935. In that year there were 146 notified cases—67 of puerperal fever and 79 of puerperal pyrexia—a decrease of 27 and 9 respectively on the figures for 1934. Though more actual cases were notified this year, it should be noted that the actual mortality rates were not similarly increased.

Of the 93 notified cases of puerperal fever, subsequent investigation confirmed the diagnosis in 87 cases. Of the 139 notified cases of puerperal pyrexia 57 developed into cases of confirmed puerperal fever. Altogether, therefore, there were 144 confirmed cases of puerperal fever in the City during the year. An analysis of these 144 confirmed cases showed that 16 ended fatally, 8 having been originally notified as cases of pyrexia—a case mortality of 14·0 per cent.—practically the same as in the previous year, when the rate was 13·9 per cent. Of the remainder, the case mortality was 9·2 per cent., a reduction of practically half when compared with the figure 18·0 per cent. for 1935.

Maternal Deaths (Tables 10 to 16).

As in former years all maternal deaths occurring during the year were specially investigated and reported upon to the Department of Health. In all there were 73 such deaths, a decrease of 12 on the previous year. Of these, 32 were of women not belonging to the City, thus leaving 41 as the corrected figure for 1936. The maternal mortality rate for the whole City was 5·5 per 1,000 births. The figures for previous years will be seen in tables 14 and 15. As these figures have been arrived at after clinical investigation, a third table (table 16) has also been drawn up for comparative purposes showing not only these, but the average rates for the years 1931-35, as calculated by the Registrar-General, based upon death certification.

Puerperal sepsis accounted for 13 deaths or a rate of 1·8 per 1,000 births, compared with 11 or 1·6 in the previous year and 21 or 2·9 in 1934. The number of deaths due to toxæmias of pregnancy was 8, equivalent to a rate of 1·1 per 1,000 births, compared with 11 or 1·3 in 1935, and 7 or ·9 in 1934.

Births (Tables 17 to 21).

The registered births numbered 8,249 compared with 7,725 in 1935, representing an increase of 524. After correction for transfers the number was 7,391, compared with 7,037 in 1935. Of these there were 3,759 male births and 3,632 female. The birth-rate for the whole City was 15.9, compared with 15.3 for 1935 and 15.7 for 1934.

The total number of births notified during the year was 8,595, compared with 8,192 in 1935. Of these 626 or 7.3 per cent. were premature, compared with 567 or 6.9 per cent. in 1935. A further 422 or 4.9 per cent. were still-born, compared with 380 or 4.4 per cent. for 1935.

An analysis of the number of births attended by panel and non-panel practitioners shows that most of the confinements attended are distributed among a comparatively small number of doctors. The majority of general practitioners in the City appear to do no more than an average of 1 to 5 confinements in the year.

The illegitimate births numbered 464 or 6.3 per cent. of the total corrected births, compared with 6.9 for the previous year.

Ophthalmia Neonatorum (Table 22).

There were 45 more cases notified during the year as compared with 1935. Of the 92 cases notified, 4 cases resulted in impaired eyesight. Of these, 2 children have suffered impaired vision in both eyes, and 1 child in one eye only, while the fourth child has completely lost vision in one eye.

Deaths (Tables 23 to 31).

The number of deaths under one year registered in 1936 was 505, as compared with 490 in 1935. The infantile mortality rate was 68 per 1,000 births, compared with a rate of 70 for 1935.

An analysis of the 505 infant deaths shows that the greatest number occur in the neonatal period, thus 252 or 49.9 per cent. of this total occurred within the first four weeks of life, equivalent to a rate of 34.1 per 1,000 births. Also, 179 occurred within the first week or 35.4 per cent., equivalent to a mortality rate of 24.2 per 1,000 births. There is little doubt that no very great further reduction in the infantile mortality rates can be achieved or expected until and unless some reduction can be effected in the number of deaths occurring in the neonatal period. Recent research appears to suggest that infection of various kinds plays a major part in bringing about these deaths in the early days of life. Tables 29 and 30 show how these deaths are distributed according to age groups and according to causes. On examining the main causes which go to swell the neonatal mortality, it will be seen that there were 19 deaths from pneumonia, 1 from bronchitis, and 6 from diarrhœa and enteritis during the year, compared with 20 from pneumonia, 5 from bronchitis, and 11 from diarrhœa and enteritis in 1935. Grouped together, there were 16 fewer deaths from these causes in 1936 than in 1935. Further, in the past year prematurity accounted for 115 deaths, congenital malformations for 9, and injury at birth for 24. During 1935 there were recorded, 107 deaths due to prematurity, 11 to congenital malformations, and 37

to injury at birth. In this group also there is a reduction, though less in number, of deaths in 1936 as compared with 1935.

Of the 505 deaths under 1 year, 49 were of illegitimate infants. The figures for 1935 were 490 and 80 respectively. In both years the chief causes of death in both groups were similar, viz. (1) prematurity ; (2) pneumonia ; and (3) diarrhœa and enteritis.

The total number of deaths between 1 and 5 years was 148, and the total from birth to 5 years was 653. The corresponding figures for illegitimate children alone were 15 and 64 respectively. The figures for previous years from 1905 will be seen in table 28. Deaths from respiratory diseases are classified and shown in table 31.

Visits in the Homes.

During the year 6,177 infants under 1 year came under the care of the Health Visiting Staff, and received 19,980 visits. The staff also paid 50,346 visits to children between 1 and 5 years of age and, as has already been noted, 3,235 special visits to expectant mothers.

Voluntary Health Workers took in hand the fortnightly visiting of 1,265 infants, of whom 626 were new cases passed on to them during the year, and 639 cases carried forward from the previous year.

Clinics.

No new clinics were opened during the year, and the number of Child Welfare Centres remains at 16, as in the previous year.

Preventive Clinics (Table 32).

During the year the health of 3,521 children was kept under general supervision at these clinics, where 43,011 attendances were recorded. In 1935 the comparable figures were 3,497 and 40,262 respectively.

Curative Clinics (Table 33).

The Curative Clinic held at the Gorgie Centre was transferred to the Stenhouse Area, in the month of April, and one of the three clinics at the High Street Centre was closed in October.

The total number of new cases treated during the year was 3,181, and the total attendances were 20,047. In 1935 the comparable figures were 3,105 and 20,340 respectively.

Ultra Violet Ray Clinics (Table 34).

During the year 97 children were treated for various conditions at these clinics. The number of exposures to the mercury vapour lamps, which were recorded, was 1,780, and to the carbon arc lamps the number was 1,265.

Rheumatic Clinic (Table 35).

The number of notifications received during the year was 25, compared with 40 in 1935 and 77 in 1934. These figures do not in any way give a true record of the incidence of the disease in the City. For example, the number of cases that have come up to the rheumatic clinic this year for the first time was 61, compared with 50 last year. It would appear that though general practitioners have knowledge of the rheumatic clinic and recommend cases directly to it, many do not take advantage of the system of voluntary notification of the disease in existence in the City.

The Clinic is held every Wednesday forenoon at the Royal Hospital for Sick Children, and is under the joint clinical charge of Dr. Norman S. Carmichael and Dr. Lewis Thatcher, whose report regarding the year's work is as follows :—" During the year 61 new cases have come up for treatment, and there have been 679 attendances by old cases. This is an increase of 11 new cases, and of 109 attendances by old cases over the number for the previous year.

The number of visits made to patients in their own homes by the visiting nurse was 40 during the year.

The new cases fell, naturally, into five groups, viz. :—those suffering from carditis, chorea, arthritis, early manifestations of rheumatism, and cases which attended but were not rheumatic cases.

The carditis cases, 12 in number, all suffered from disease of the mitral valve, but one of these cases at a later period developed aortic disease as well.

Three of these carditis cases showed no other signs of rheumatism, 3 had arthritis and 5 others had chorea as well as carditis. During the period under observation in 4 cases the lesions seemed to advance. One was treated at home and the cardiac disability became more marked. Three had to be re-admitted to hospital, and one of these, already mentioned, developed an aortic lesion. In the third group of carditis cases, 4 made excellent progress and the evidence of valvular disease completely disappeared.

Of the *chorea cases*—12 in number—this was the only manifestation noted and none, so far, have had any recrudescence of their chorea and none of them have developed carditis.

In the group of *Early Manifestations of Rheumatism*—22 in number—"growing pains" was the complaint for which the children attended, and, so far, none has shown any other signs of rheumatism.

Among the non-rheumatic children who came up to the clinic—8 in number—we found such conditions as :

Congenital Heart Disease	1 case.	General Debility . . .	1 case.
Nervous Instability . . .	2 cases.	Emphysema . . .	1 case.
Tonsilitis	1 case.	Post-Influenzal Debility	1 case.
Spondylitis	1 case.		

During the somewhat limited period in which the Home was open, 20 cases were sent to Fushiebridge, and were greatly benefitted by their stay there.

Full advantage was taken of the clinic for remedial exercises, especially for cases of poor posture and for cases of convalescent chorea. All these cases received great benefit from their attendance at this clinic. With regard to the notification of rheumatism, it would appear that this is not being systematically carried out by the doctors in the town."

Mothercraft Classes (Table 36).

Three hundred and thirteen mothers attended the Mothercraft Classes during the year, a record figure compared with any previous year and 13 more than the figure for 1935. Of this total 193 mothers entered the written examination for the Hutchison Shield Trophy, being 17 more than in 1935 and also the largest entry ever made for this competition. This silver shield was gained by Mrs Scott for the Portobello Centre, the first time the centre has ever secured the trophy. Prizes were given for other work which was competed for by 87 mothers and 11 fathers—a slightly smaller number than in 1935 when the figures were 96 and 14 respectively. A picnic was held in June, in Spylaw Park, Colinton, when all those attending the classes were invited to come and bring not more than 1 baby and 1 toddler. The Lady Provost, Mrs Gumley, honoured the occasion by her presence and presented the Hutchison Shield and other prizes to the respective winners. Mrs Gumley also delighted the mothers by chatting with each little group and showed them at close quarters her chain of office, recently presented by the women of Edinburgh.

Special Demonstrations in Cookery.

During the year cookery demonstrations were given at two Centres by Mrs Bruce, namely, at Prestonfield and South Fort Street—where 13 classes were held. The number of mothers on the roll was 27, and the average attendance was 4.6. In the previous year 3 centres were visited with a total enrolment of 47 mothers and an average attendance of 7 at the classes.

This year Mrs Bruce successfully conducted 16 demonstrations in the Waverley Market during the Health Exhibition. At these 17 mothers from Prestonfield Centre made 38 attendances, and 7 mothers from Leith Centre totalled 26 attendances.

Milk and Dinners (Table 37).

It has been found necessary to increase the distribution during the year of both milk and dinners in connection with the welfare Centre Clinics—14,403 pints of milk and 2,304 more dinners have been given compared with the previous year.

Day Nurseries (Table 38).

An analysis of the attendances at the four Corporation day nurseries shows that fewer infants and toddlers have attended at Stockbridge and Leith Nurseries—in all 1,848 and 801 respectively less than in 1935. At Viewforth Nursery, though there were fewer infants and more toddlers during the year, the attendances, when grouped

together, showed a total increase of 712 compared with the previous year. At Dumbiedykes Nursery, on the other hand, there were more infants and fewer toddlers in attendance, and the total was 264 more than in 1935.

Toddler Playgrounds (Table 39).

One new playground, at Marshall Street, was opened during the year, making in all 19, compared with 18 of these playgrounds in 1935. Detailed information of the work and finance of these institutions will be found in the separate Annual Report issued by the Voluntary Health Workers' Association.

Child Gardens (Table 40).

There are now in the City 15 Child Gardens and Nursery Schools, 2 of which are under the direct control of the Education Committee, the other 13 being controlled by Voluntary Committees. These latter are more closely linked up with the Child Welfare Department, whose medical officers supervise the medical needs of the children, and at regular intervals carry out a general medical examination of the whole school.

Homes for Mothers and Infants.

The following Homes receive annual grants from the Corporation in recognition of the work they do in association with the Maternity and Child Welfare Scheme.

(1) *The Edinburgh Home for Mothers and Babies at 17 Claremont Park, Leith :*

	Mothers.	Babies.
In residence, 1st January, 1936 . . .	8	6
Admitted during the year . . .	30	22
Discharged during the year . . .	27	24
In residence on 1st January, 1937 . . .	11	4

(2) *Salvation Army Home for Mothers and Infants at Bonnington Bank House, Ferry Road, Leith :*

	Mothers.	Infants
In residence, 1st January, 1936 . . .	21	15
Admitted during the year . . .	33	29
Discharged during the year . . .	38	33
In residence, 1st January, 1937 . . .	16	11

(3) *Hawthornbrae Convalescent Home, Duddingston.*

Nursing mothers and children are admitted to this Home.

During the year 25 mothers and 24 infants were sent and paid for by the Corporation, the average stay being for two weeks.

(4) *Edinburgh Home for Babies at 30 Colinton Road and 3 Forbes Road, Edinburgh :*

(a) *30 Colinton Road* (average stay in the Home is 18 to 24 months)—

	Babies.
In residence, 1st January, 1936	20
Admitted during the year	18
Discharged during the year	19
In residence, 1st January, 1937	19

(b) *3 Forbes Road* (average stay in the Home is 8 to 10 months)—

	Babies.
In residence, 1st January, 1936	6
Admitted during the year	14
Discharged during the year	14
In residence, 1st January, 1937	6

(5) *Humbie Children's Village :*

During the year parties of pre-school children are sent for periods of three or four weeks, all the year round, to this country Home, more in summer and fewer in winter time. In 1936, 176 such toddlers were given a change to Humbie Village, compared with 158 the previous year.

Other Homes.—Though not in receipt of town subsidies, the following Institutions co-operate with the Child Welfare Department in taking women and children under their care into the country. Such are the Leadburn Home for Tired Mothers and Providence House at Kinghorn. Another Home already referred to in the section of this report dealing with the Rheumatic Clinic is situated at Fushiebridge. It is entirely financed by the Misses Romanes and is a great boon to convalescent rheumatic children, though children are sent for other debilitating conditions as well. During the past year, 20 rheumatic children—15 girls and 5 boys—were specially recommended through the Rheumatic Clinic and greatly benefitted by their stay. Three mothers with their babies were also sent for special reasons through the Child Welfare Department. In addition the Misses Romanes admit many other children to their Home through other agencies, also at no cost to the recipients beyond their bus fares there and back.

Victoria Park Home.—This Home is for the reception of babies and toddlers suffering from conditions other than acute disease, but who are debilitated from various causes and not thriving in their own homes. Intended to house 20 such cases, there were admitted during the year 128—a few less than the previous year. The average daily occupation of the beds in the Home was 20.

Investigations.—Apart from the routine work of the Department, it has been possible during the year to institute an investigation along with Dr. J. L. Henderson into the health history of all infants born during the year 1931, who were notified as

premature. All the survivors of this group are now five years of age and ready to enter the "big" schools. As the investigation progressed its scope has widened so that results are not yet available for publication. So far, only general impressions can be given, and among these this series of cases suggests that, given survival over the first week or rather over the first four days of life, the premature child has the same chances of survival as a full time infant. On reaching five years of age they are of average weight and height irrespective of their actual birth weights being three, four or five pounds. Nor do they appear any more susceptible to infection and disease. None of the present series of cases gives a history of having had much illness.

Plans have been prepared to make a more detailed investigation of all still-births, which are notified, during the coming year, and, where information is available, also of all abortions which take place.

Another interesting enquiry for which facts are being collected relates to the possible association between the epiphyseal centres of ossification of the hand and growth in length in young children. It is suggested that the appearance of these is more closely related to length-age than to chronological age as is generally accepted.

Acknowledgments.—I should like here to put on record the great help I have received during the past year from every member of the staff in carrying on the work of the Department. I should like also to express my gratitude to the members of the Voluntary Health Workers' Association who have done much valuable work on a voluntary basis in visiting in the homes, carrying on a very successful sewing work party, organising the work of the toddlers' playgrounds, and in many other ways being a real help to me. I think the Association is to be heartily congratulated upon having secured the services of Dr. Brotherston as Organising Secretary. Dr. Brotherston has very successfully carried through the arduous work of the Association during the difficult transition period of adjustment to new conditions, consequent upon the death of Bailie Mrs Somerville.

TABLE 1.—ANTE-NATAL CLINICS.

CENTRE.	Number of Clinics held.	ATTENDANCES.		
		New Cases.	Old Cases.	Total.
Cowgate	97	412	631	1,043
Torphichen Street	51	214	1,444	1,658
Marshall Street	47	68	459	527
Royal Maternity Hospital	365	2,491	10,687	13,178
Leith	50	428	973	1,401
Elsie Inglis Memorial Hospital	156	1,491	7,116	8,607
Niddrie	24	186	451	637
Prestonfield	29	61	256	317
Portobello	54	137	464	601
Stockbridge	52	145	578	723
Stenhouse	25	73	163	236
Gorgie	22	49	79	128
Totals	972	5,755	23,301	29,056
Figures for 1935	917	5,485	22,309	27,744

TABLE 2.—POST-NATAL CLINICS.

CENTRE.	No. of Clinics held.	Attendances.
Royal Maternity Hospital. . . .	52	1,648
Elsie Inglis Memorial Hospital . . .	51	1,691
Seen at other Clinics . . . .	...	148
Totals	103	3,487

TABLE 3.—MIDWIVES ACT.

1. The number of certified Midwives who intimated to the Local Authority their intention to practise in the district	17
2. (a) Total number of Births (notified)	8,595
(b) Total number of Deaths of New-born Children (within 10 days)	197
(c) Actual number of Births attended by Midwives	314
(d) Deaths of New-born Children occurring in the practice of Midwives	7
(e) Number of Births not attended by a Doctor or Midwife	1
3. (a) Total number of cases of Ophthalmia Neonatorum	92
(b) Actual number of Ophthalmia Neonatorum cases occurring in the practice of Midwives	3
(c) Actual number of cases occurring where confinement not attended by a Doctor or Midwife	0
4. (a) Total number of cases of Puerperal Sepsis	144
(b) Total number of Deaths from Puerperal Sepsis	8
(c) Actual number of cases of Sepsis in practice of Midwives	1
(d) Actual number of Deaths from Puerperal Sepsis in practice of Midwives	0
(e) Actual number of cases occurring where confinement not attended by a Doctor or Midwife	0
5. (a) Total number of cases of Confirmed Puerperal Pyrexia	88
(b) Total number of Deaths from Puerperal Pyrexia	8
(c) Actual number of cases of Puerperal Pyrexia in practice of Midwives	0
(d) Actual number of Deaths from Puerperal Pyrexia in practice of Midwives	0
(e) Actual number of cases occurring where confinement not attended by a Doctor or Midwife	0
6. (a) Total number of Still-births	422
(b) Actual number of cases of Still-births occurring in the practice of Midwives	13
7. Cases of Emergency	48

Cases of emergency in which medical practitioners were called in, under Section 22 of the Act, during 1936 are noted in the following classified list, and number 48 as compared with 36 in 1935 :—

Cases of Emergency.

Incomplete Abortion	1
Delay in Labour	*11
Occipito-posterior Presentation	1
Breech Presentation	1
Footling Presentation	1
Retained Placenta	2
Accidental Hæmorrhage	2
Perincal Tear	12
Still-birth	11
Illness of Child	6

* Includes 2 still-births

TABLE 4.—PUERPERAL PYREXIA.

Total number of cases of puerperal pyrexia notified	139
Total number subsequently developing into puerperal fever	57
Total number of deaths of cases notified as puerperal pyrexia—	
Puerperal Fever	2
Puerperal Septicæmia	3
Puerperal Pyrexia	1
Broncho Pneumonia	1
Lobar Pneumonia	1
	<hr/> 8

TABLE 5.—PUERPERAL FEVER.

Total number of cases of puerperal fever notified	93
Total number of cases notified but not confirmed—	
Urinary Infection	1
Mastitis	2
Tuberculosis	1
Miscarriage	2
	<hr/> 6
	87
	<hr/>

TABLE 6.—RÉSUMÉ OF CONFIRMED CASES OF PUERPERAL FEVER.

Notified as puerperal fever	87
Notified as puerperal pyrexia	57
	<hr/>
TOTAL	144
	<hr/>

TABLE 7.—DEATHS FROM CONFIRMED CASES OF PUERPERAL FEVER.

Number notified as puerperal fever	8
Number notified as puerperal pyrexia	8
	<hr/>
TOTAL	16
	<hr/>

TABLE 8.—AGES of PATIENTS suffering from PUERPERAL FEVER.

15 years and under 20 years	6
20 years and under 25 years	39
25 years and under 30 years	47
30 years and under 35 years	33
35 years and under 40 years	11
40 years and over	8
	<hr/>
TOTAL	144
	<hr/>

TABLE 9.—AGES at DEATH of PATIENTS suffering from Confirmed PUERPERAL FEVER.

15 years and under 20 years	1
20 years and under 25 years	4
25 years and under 30 years	5
30 years and under 35 years	4
35 years and under 40 years	2
	<hr/>
TOTAL	16
	<hr/>

TABLE 10.—MATERNAL DEATHS.

MATERNAL DEATHS, 1932-1936.	1932	1933	1934	1935	1936
	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
Cases attended by—					
Private Doctors and died in their own homes	13	10	10	11	20
Private Doctors and removed to Institutions	32	23	22	22	15
Midwives and died at home . . . . .	...	...	4	4	...
Dispensaries and Pupil Nurses and removed to Institutions	11	10	10	6	7
Dispensaries and Pupil Nurses at home	2	...	...	4	5
Attended in Institutions	42	55	50	51	53
No Medical care . . . . .	...	2	4	2	...
Totals	100	100	100	100	100

TABLE 11.—MATERNAL DEATHS.

AGES AT DEATH —

20 years and under 25 years	9 or 22 per cent. of the total.
25 years and under 30 years	11 „ 27 „ „ „
30 years and under 35 years	9 „ 22 „ „ „
35 years and under 40 years	7 „ 17 „ „ „
40 years and under 45 years	5 „ 12 „ „ „
TOTAL	41 100

TABLE 12.—MATERNAL DEATHS.

CAUSES OF DEATH :—

<i>Septicæmia.</i>	
Puerperal sepsis	13
<i>Toxæmia.</i>	
Eclampsia	4
Hyperemesis	2
Nephritis	2
	— 8
<i>Hæmorrhage.</i>	
Postpartum Hæmorrhage	4
Placenta Prævia	1
	— 5
<i>Embolism.</i>	
Number of Deaths	2

<i>Shock.</i>	
Number of Deaths	3
<i>Infective Complications.</i>	
Acute Pylonephritis	3
Broncho Pneumonia	1
Lobar Pneumonia	1
	— 5
<i>Other Conditions.</i>	
Mitral Stenosis	3
Toxic Goitre	1
Myocardial Failure	1
	— 5
TOTAL	41

TABLE 13.—MATERNAL DEATHS.

MATERNAL DEATHS 1936.	Septicæmia.	Toxæmia.	Hæmorrhage.	Embolism.	Other conditions complicating or associated with Child-birth.	Totals.
Cases attended by—						
Private Doctors and died at home	4	1	0	2	1	8
Private Doctors and removed to Institutions . .	2	1	2	0	1	6
Midwives and died at home	0	0	0	0	0	0
Dispensaries and Pupil Nurses and removed to Institutions	2	0	1	0	0	3
Dispensaries and Pupil Nurses at home	0	0	1	0	1	2
In Institutions	5	6	1	0	10	22
Totals	13	8	5	2	13	41

TABLE 14.—MATERNAL DEATHS, 1927-1936.

TOTALS.

	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Septicæmia	17	20	19	13	16	14	11	21	11	13
Toxæmia	10	10	12	19	10	7	13	7	11	8
Hæmorrhage	9	7	9	4	5	4	2	5	1	5
Embolism	5	4	2	1	4	2	3	2	6	2
Other Conditions	12	17	9	22	16	20	19	15	24	13
	53	58	51	59	51	47	48	50	53	41

TABLE 15.—MATERNAL DEATHS, 1927-1936.

RATE PER 1000 BIRTHS.

	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Septicæmia	2·2	2·7	2·6	1·8	2·2	2·0	1·6	2·9	1·6	1·8
Toxæmia	1·3	1·3	1·6	2·6	1·4	1·0	1·9	·9	1·3	1·1
Hæmorrhage	1·2	·9	1·2	·5	·7	·6	·3	·6	·1	·7
Embolism	·7	·5	·3	·1	·6	·3	·4	·3	·7	·3
Other Conditions	1·6	2·3	1·2	3·0	2·2	2·1	2·8	1·9	2·9	1·8

TABLE 16.—MATERNAL MORTALITY.

YEAR	No. of Births (Corrected for Transfers)	REGISTRAR GENERAL'S CLASSIFICATION						AFTER CLINICAL INVESTIGATION					
		Puerperal Sepsis	Rate per 1,000 Births	Other Diseases Associated with Child-birth	Rate per 1,000 Births	Total Deaths	Rate per 1,000 Births	Puerperal Sepsis	Rate per 1,000 Births	Other Diseases Associated with Child-birth	Rate per 1,000 Births	Total Deaths	Rate per 1,000 Births
1936	7,391	14	1.9	27	3.7	41	5.5	13	1.8	28	3.8	41	5.5
1935	7,037	11	1.6	26	3.7	37	5.3	11	1.6	42	6.0	53	7.5
1934	7,188	19	2.6	19	2.6	38	5.3	21	2.9	29	4.0	50	7.0
1933	6,835	11	1.6	22	3.2	33	4.8	11	1.6	37	5.4	48	7.0
1932	6,960	15	2.2	22	3.2	37	5.3	14	2.0	33	4.7	47	6.8
1931	7,164	14	2.0	26	3.6	40	5.6	16	2.2	35	4.9	51	7.0
Average 1931-35	7,037	14	2.0	23	3.3	37	5.3	15	2.1	35	5.0	50	7.1

TABLE 17.—Particulars regarding BIRTHS after necessary corrections have been made for transfers.

Quarter.	Total Births.	Legitimate.	Illegitimate.	Percentage of Illegitimate to Total Births.
1st	1,893	1,786	107	5.7
2nd	2,010	1,858	152	7.6
3rd	1,757	1,655	102	5.8
4th	1,731	1,628	103	5.9
Totals . . .	7,391	6,927	464	6.3

TABLE 18.—BIRTHS allocated according to the three areas of the extended City.

Area.	Births.	Rate per 1000 of Population.
Edinburgh	4,961	15.4
Leith	1,281	16.4
Suburban	967	19.0
Institutions	145	...
Military Quarters . . .	37	...
Whole City	<u>7,391</u>	<u>15.9</u>

TABLE 19.—Corrected BIRTH-RATES for the eight large towns in Scotland and for the whole of Scotland for 1936.

TOWN.	Per 1000 of Population.	TOWN.	Per 1000 of Population.
Glasgow	20.0	Paisley	18.8
Edinburgh	15.9	Greenock	20.3
Dundee	17.7	Motherwell and Wishaw	19.6
Aberdeen	17.2	Clydebank	17.9
SCOTLAND		17.9	

TABLE 20.—NOTIFICATION OF BIRTHS—Analysis of 8,595 Births notified during the year.

I.	Births attended by Private Doctors	1,977
II.	Births attended by Private Doctors with a District Nurse—	
	(1) Queen's Nurses	823
	(2) Buccleuch Place Nurses	116
		939
III.	Births attended by Registered Midwives	314
IV.	Births attended at home by Students and Pupil Nurses—	
	(1) Royal Maternity Hospital	867
	(2) Elsie Inglis Memorial Hospital	572
	(3) Cowgate Dispensary	286
	(4) Marshall Street Dispensary	10
	(5) Deaconess Hospital	88
		1,823
V.	Births attended in Maternity Hospitals and Training Centres—	
	(1) Royal Maternity Hospital	2,073
	(2) Elsie Inglis Memorial Hospital	1,114
	(3) Deaconess Hospital	2
	(4) Western General Hospital	353
		3,542
		8,595

TABLE 21.—Analysis of comparable figures in percentages of the BIRTHS for the past five years.

	1932	1933	1934	1935	1936
Births attended by—	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
Private Doctors	35	35	34	34	34
Private Doctors with a District Nurse }					
Registered Midwives	4	4	4	4	4
Students and Pupil Nurses in Patient's Home	21	21	23	22	21
In Maternity Hospitals and Training Centres	40	40	39	40	41
	100	100	100	100	100

TABLE 22.—OPHTHALMIA NEONATORUM. The interval in days between the Birth of the Child and the onset of the disease.

Days . .	1	2	3	4	5	6	7	8	9	10	Over 10 days and under 3 months.	No Particulars.	Total.
Cases . .	4	6	6	9	7	5	7	11	10	4	17	6	92

The Confinement was attended by :—

A Doctor and Nurse	4 cases.
Nurses from Institutions	31 cases.
Dispensaries	10 cases.
In Institutions	44 cases.
Midwives	3 cases.—Total, 92 cases.

Treatment was given :—

At Home	7 cases.
At Home and Welfare Centres	8 cases.
In Hospital	77 cases.—Total, 92 cases.

Hospital treatment was given :—

In Northern General Hospital	67 cases.
In Elsie Inglis Hospital	6 cases.
In Royal Infirmary	1 case.
In Western General Hospital	3 cases.—Total 77 cases.

A Queen's Jubilee Nurse or a Nurse from the Royal Maternity Hospital attended to those children who were treated in their homes.

TABLE 23.—Distribution of the DEATHS under ONE YEAR in the different districts of the City, together with the MORTALITY-RATE for the respective areas.

Area.	Deaths under 1 year.	Deaths per 1000 Births.
Edinburgh	336	68
Leith	88	69
Suburban	73	75
Institutions	7	...
Military Quarters	1	...
Whole City	505	68
Figures for 1935	490	70

TABLE 24.—Edinburgh—INFANTILE MORTALITY (deaths under ONE YEAR per 1000 Births).

Year.	Infantile Mortality.	Year.	Infantile Mortality.	Year.	Infantile Mortality.	Year.	Infantile Mortality.
1880	143	1895	152	1910	103	1925	96
1881	128	1896	122	1911	115	1926	80
1882	121	1897	164	1912	110	1927	80
1883	128	1898	*141	1913	101	1928	75
1884	135	1899	147	1914	110	1929	80
1885	120	1900	132	1915	132	1930	82
1886	136	1901	143	1916	100	1931	69
1887	137	1902	119	1917	‡123	1932	73
1888	128	1903	117	1918	94	1933	66
1889	133	1904	125	1919	§117	1934	62
1890	144	1905	124	1920	89	1935	70
1891	138	1906	112	1921	96	1936	68
1892	135	1907	121	1922	91	...	...
1893	148	1908	+114	1923	82	...	...
1894	125	1909	113	1924	89	...	...

* Sanitary Dept. formed 1898. † Voluntary Visiting in homes. ‡ Child Welfare Dept. formed May, 1917.

§ Reflection world influenza epidemic, 1918-1919. || City Boundaries extended.

TABLE 25.—Particulars regarding BIRTHS, DEATHS of CHILDREN at age periods from ONE to FIVE YEARS, and also the INFANTILE MORTALITY in each of the twenty-three Municipal Wards.

WARD.	BIRTHS.		DEATHS.						Infantile Mortality (Rate per 1000 Births).
	Number.	Per 1000 of Population.	Under 1 Year.	1-2.	2-3.	3-4.	4-5.	Total.	
Calton	291	14.2	12	1	...	...	2	15	41
Canongate.	358	18.6	31	4	1	...	...	36	87
Newington	215	10.4	7	2	1	...	...	11	33
Morningside	174	8.0	5	...	...	...	1	6	29
Merchiston	202	10.1	4	1	2	...	...	7	20
Gorgie	539	17.7	39	4	2	1	2	48	72
Haymarket	186	9.9	14	3	1	...	2	20	75
St. Bernard's	378	19.1	27	3	1	2	...	33	71
Broughton	256	15.1	17	2	...	1	1	21	66
St. Stephen's	278	17.4	26	2	1	1	...	30	94
St. Andrew's	160	16.0	11	1	2	2	1	17	69
St. Giles	361	20.4	28	4	1	2	...	35	78
Dalry	409	20.6	25	3	1	1	2	32	61
George Square	273	15.3	17	1	3	2	1	24	62
St. Leonard's	307	18.2	24	2	1	1	...	28	78
Portobello	574	16.2	49	9	2	1	2	63	85
South Leith	416	14.5	29	4	2	2	...	37	70
North Leith	372	20.9	17	3	4	...	2	26	46
West Leith	244	13.2	24	5	...	1	1	31	98
Central Leith	249	18.8	18	4	1	...	...	24	72
Liberton	471	25.1	49	9	5	2	4	69	104
Colinton	107	10.9	9	...	...	...	1	10	84
Corstorphine and Cramond	389	17.3	15	1	...	1	1	18	39
Institutions	145	...	7	3	1	...	...	11	...
Military Quarters	37	...	1	...	...	...	...	1	...
Totals	7,391	15.9	505	71	32	22	23	653	68
Edinburgh Area	4,961	15.4	336	42	19	15	14	426	68
Leith Area	1,281	16.4	88	16	7	4	3	118	69
Suburban Area	967	19.0	73	10	5	3	6	97	75
Institutions	145	...	7	3	1	...	...	11	...
Military Quarters	37	...	1	...	...	...	...	1	...

TABLE 26.—CAUSES of DEATH among CHILDREN under FIVE YEARS during 1936.

CAUSE OF DEATH.	Under 1 Week.	1, and under 2 Weeks.	2, and under 3 Weeks.	3, and under 4 Weeks.	Total under 4 Weeks.	4 Weeks and under 3 Months.	3, and under 6 Months.	6, and under 9 Months.	9, and under 12 Months.	Total under 12 Months.	12 Months and under 2 Years.	2, and under 3 Years.	3, and under 4 Years.	4, and under 5 Years.	Total 1-5 Years.	Total under 5 Years.
Chickenpox . . . . .	...	...	...	...	...	...	...	6	9	15	17	4	4	...	25	40
Measles . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough . . . . .	...	...	...	...	...	4	2	4	1	11	9	1	1	...	11	22
Diphtheria and Croup . . . . .	...	...	1	...	1	...	...	...	...	1	...	3	2	6	11	12
Erysipelas . . . . .	...	...	1	...	1	...	1	1	2	5	1	1	3	...	2	7
Tuberculous Meningitis . . . . .	...	...	...	...	...	...	1	...	...	1	4	3	3	3	13	14
Abdominal Tuberculosis . . . . .	...	...	...	...	...	...	1	...	1	1	1	...	1	...	2	3
Other Tuberculous Disease . . . . .	...	...	...	...	...	...	1	...	1	2	...	...	...	...	1	3
Meningitis (not Tuberculous) . . . . .	...	...	...	...	...	2	2	1	...	5	2	...	...	1	3	8
Hydrocephalus	1	...	...	...	1	1	...	...	...	2	1	...	...	...	1	3
Convulsions . . . . .	...	1	1	...	3	3	4	1	...	11	...	...	...	...	...	11
Pneumonia (all forms)	5	7	1	6	19	24	23	14	11	91	25	7	3	2	37	128
Bronchitis . . . . .	...	...	...	1	1	8	5	...	1	15	2	2	...	...	4	19
Laryngitis . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea and Enteritis . . . . .	...	1	5	...	6	6	10	7	2	31	3	...	...	...	3	34
Other Digestive Diseases	2	1	1	...	4	4	5	2	...	15	1	1	3	...	5	20
Congenital Malformations	5	3	...	1	9	5	1	...	...	16	1	1	...	...	2	18
Congenital Heart	7	2	1	...	10	3	...	1	...	14	1	...	...	1	2	16
Premature Birth	100	8	4	3	115	7	3	...	...	125	...	...	...	...	...	125
Atrophy, Debility and Marasmus	30	1	5	4	40	12	5	4	...	61	...	...	...	...	...	61
Atelectasis	9	...	...	...	9	...	...	...	...	9	...	...	...	...	...	9
Injury at Birth	17	4	3	...	24	...	...	...	...	24	...	...	...	...	...	24
Suffocation, overlaying . . . . .	...	1	...	...	1	6	3	...	...	10	...	...	...	...	...	10
Syphilis . . . . .	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1
Rickets . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
All other Causes	2	2	2	2	8	13	10	6	3	40	2	9	4	10	25	65
Totals	179	31	25	17	252	98	76	48	31	505	71	32	22	23	148	653

TABLE 27.—CAUSES of DEATH among ILLEGITIMATE CHILDREN under FIVE YEARS during 1936.

CAUSE OF DEATH.	Under 1 Week.	1, and under 2 Weeks.	2, and under 3 Weeks.	3, and under 4 Weeks.	Total under 4 Weeks.	4 Weeks and under 3 Months.	3, and under 6 Months.	6, and under 9 Months.	9, and under 12 Months.	Total under 12 Months.	12 Months and under 2 Years.	2, and under 3 Years.	3, and under 4 Years.	4, and under 5 Years.	Total 1-5 Years.	Total under 5 Years.
Chickenpox . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles . . . . .	...	...	...	...	...	...	...	...	2	2	2	...	...	...	2	4
Scarlet Fever . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough . . . . .	...	...	...	...	...	...	1	1	...	2	1	...	...	...	1	3
Diphtheria and Croup . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1
Erysipelas . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculous Meningitis . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1
Abdominal Tuberculosis . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Tuberculous Disease . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Meningitis (not Tuberculous) . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hydrocephalus . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Convulsions . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia (all forms) . . . . .	...	...	...	1	1	1	3	2	...	7	3	...	1	...	4	11
Bronchitis . . . . .	...	...	...	...	...	...	1	...	1	2	...	...	...	...	...	2
Laryngitis . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea and Enteritis . . . . .	...	...	1	...	1	2	2	1	1	7	1	...	...	...	1	8
Other Digestive Diseases . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Congenital Malformations	1	...	...	...	1	...	...	...	...	1	...	...	...	...	...	1
Congenital Heart	2	...	...	...	2	1	...	...	...	3	...	...	...	1	1	4
Premature Birth	12	...	...	...	12	...	...	...	...	12	...	...	...	...	...	12
Atrophy, Debility and Marasmus . . . . .	...	...	...	1	1	3	...	...	...	4	...	...	...	...	...	4
Atelectasis	1	...	...	...	1	...	...	...	...	1	...	...	...	...	...	1
Injury at Birth	1	...	1	...	2	...	...	...	...	2	...	...	...	...	...	2
Suffocation, overlaying . . . . .	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	1
Syphilis . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rickets . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
All other Causes	1	1	...	...	2	2	...	1	...	5	2	...	1	1	4	9
Totals	18	1	2	2	23	10	7	5	4	49	9	...	2	4	15	64

TABLE 28.

INFANTILE MORTALITY. 1905-1936.

DEATHS OF CHILDREN under 5 years. 1905-1936.

Year.	Infantile Mortality.	Average for 5 years.	Year.	No. of Deaths.	Average for 5 years.
1905	124		1905	1,439	
1906	112		1906	1,348	
1907	121		1907	1,452	
* 1908	114		* 1908	1,297	
1909	113	117	1909	1,305	1,368
1910	103		1910	1,120	
1911	115		1911	1,137	
1912	110		1912	1,041	
1913	101		1913	983	
1914	110	108	1914	1,138	1,084
1915	132		1915	1,279	
1916	100		1916	910	
† 1917	123		† 1917	1,150	
1918	94		1918	816	
* 1919	117	113	* 1919	1,091	1,049
1920	89		1920	877	
§ 1921	96		§ 1921	1,283	
1922	91		1922	1,290	
1923	82		1923	1,136	
1924	89	89	1924	1,239	1,165
1925	96		1925	1,234	
1926	80		1926	903	
1927	80		1927	943	
1928	75		1928	844	
1929	80	82	1929	868	958
1930	82		1930	932	
1931	69		1931	694	
1932	73		1932	755	
1933	66		1933	657	
1934	62	70	1934	610	730
1935	70		1935	640	
1936	68		1936	653	

* Voluntary visiting in Homes.

† Child Welfare Dept. formed—May, 1917.

‡ Reflection world influenza epidemic—1918-1919.

§ City Boundaries extended.

TABLE 29.—INFANTILE MORTALITY.

Ages at Death and Percentage of same to Total Deaths under One Year.

AGE PERIODS.	1912		1917		1936	
	No. of Deaths.	Rate Per Cent.	No. of Deaths.	Rate Per Cent.	No. of Deaths.	Rate Per Cent.
Under 1 Week	188	26.8	133	22.0	179	35.5
1-2 Weeks	27	3.8	29	4.8	31	6.1
2-3 Weeks	44	6.3	21	3.5	25	5.0
3-4 Weeks	26	3.7	21	3.5	17	3.4
4 Weeks and under 3 Months .	127	18.1	92	15.2	98	19.4
3-6 Months	105	15.0	109	18.1	76	15.0
6-9 Months	91	13.0	95	15.7	48	9.5
9-12 Months	94	13.3	104	17.2	31	6.1
TOTALS	702		604		505	

TABLE 30.—INFANTILE MORTALITY.
Contributory Causes of Infantile Mortality.

CAUSE OF DEATH.	1912		1917		1936	
	No. of Deaths.	Rate Per Cent.	No. of Deaths.	Rate Per Cent.	No. of Deaths.	Rate Per Cent.
Whooping Cough	38	5.4	56	9.3	11	2.1
Measles	44	6.3	52	8.6	15	3.0
Other Infectious Diseases . . . . .	...	...	6	1.0	6	1.2
Tuberculous Diseases	24	3.4	17	2.8	4	.6
Meningitis and Convulsions	45	6.4	43	7.1	16	3.2
Bronchitis and Pneumonia	138	19.7	125	20.7	106	21.0
Diarrhoea and Enteritis	38	5.4	41	6.8	31	6.1
Other Digestive Diseases	18	2.6	13	2.1	15	3.0
Premature Birth, Malformations, Atelectasis, Injury at Birth	195	27.8	207	34.3	249	49.3
Overlying	8	1.1	3	.5	10	...
Syphilis	24	3.4	12	2.0	...	...
All other Causes	130	18.5	29	4.8	42	8.3
TOTALS	702	...	604	...	505	...

TABLE 31.—DEATHS FROM RESPIRATORY DISEASES.

	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Pneumonia (under 4 weeks)	7	8	10	2	16	8	8	9	20	19
Pneumonia (total under 1 year)	99	88	111	99	109	88	57	54	95	91
Pneumonia (total under 5 years)	183	147	214	173	186	139	114	83	135	128
Bronchitis (under 4 weeks)	4	6	4	3	3	2	1	3	5	1
Bronchitis (total under 1 year)	32	26	22	23	27	27	8	13	16	15
Bronchitis (total under 5 years)	43	37	32	29	29	29	12	17	17	19
Laryngitis (under 4 weeks) . . . . .	...	...	...	...	...	...	...	...	...	...
Laryngitis (total under 1 year)	1	1	1	...	...	...	1	...	...	...
Laryngitis (total under 5 years)	3	1	1	1	1	1	3	...	...	...

TABLE 32.—PREVENTIVE CLINICS.

CENTRE.	Number of Clinics held.	NEW CASES.			TOTAL ATTENDANCES.		
		Under 1 year.	Over 1 year.	TOTAL.	Under 1 year.	Over 1 year.	TOTAL.
Gorgie	102	239	80	319	2,787	1,537	4,324
Torphichen Street	101	270	28	298	3,484	1,933	5,417
High Street	101	118	43	161	1,814	2,162	3,976
Pleasance	151	279	69	348	4,650	2,529	7,179
Windsor Street	97	249	68	317	2,604	1,009	3,613
Stockbridge	102	289	79	368	2,935	1,426	4,361
Marshall Street	49	97	53	150	1,052	492	1,544
Elsie Inglis Memorial Hospital	52	187	80	267	1,704	1,172	2,876
Prestonfield	51	71	10	81	809	732	1,541
Niddrie	51	203	61	264	1,435	546	1,981
Lochend	49	170	76	246	1,747	779	2,526
Stenhouse	53	185	147	332	1,600	610	2,210
Royal Maternity Hospital	50	370	...	370	1,447	16	1,463
TOTALS	1,009	2,727	794	3,521	28,068	14,943	43,011
Figures for 1935	971	2,641	856	3,497	26,221	14,041	40,262

TABLE 33.—CURATIVE CLINICS.

CENTRE.	Number of Clinics held.	ATTENDANCES.		
		Old Cases.	New Cases.	TOTAL.
*Cowgate	97	3,291	259	3,550
Gorgie	13	104	16	120
Stenhouse	31	191	56	247
*Torphichen Street	50	674	309	983
High Street	32	824	39	863
*Marshall Street	49	1,010	125	1,135
Portobello	100	2,830	258	3,088
Leith	153	5,454	942	6,396
*Elsie Inglis Memorial Hospital	51	1,288	901	2,189
Windsor Street	46	468	53	521
Niddrie	50	732	223	955
TOTALS	672	16,866	3,181	20,047
Figures for 1935	668	17,235	3,105	20,340

* These Dispensaries are subsidised by the Corporation, the clinics being conducted by doctors on the regular staffs of the Dispensaries.

TABLE 34.—ULTRA VIOLET RAY CLINICS.

CENTRE.	Number of Cases.	Number of Exposures given.	
		M.V. Lamp.	C.A. Lamp.
Leith	50	1,265	...
Pleasance	142	515	1,265
TOTALS	192	1,780	1,265

TABLE 35.—ANALYSIS OF NEW CASES SEEN AT RHEUMATIC CLINIC.

	1932	1933	1934	1935	1936
New Cases—					
Rheumatic	59	42	50	43	53
Non-Rheumatic	16	23	15	7	8
Total	75	65	65	50	61
*Prodromal Symptoms	15	10	6	14	22
Carditis only	19	15	14	11	3
Chorea only	12	9	16	6	12
Carditis with Chorea	5	6	9	12	5
†Arthritis	8	2	5	...	...

* This includes growing pains and arthritis associated with malnutrition and rheumatic sore throat.

† Not always present at time of examination.

TABLE 36.—MOTHERCRAFT CLASSES.

Year.	Number attending classes.	Number taking part in the Shield Competition.	WINNER OF SHIELD.	
			Name.	Centre.
1924	35	13	Mrs Alcock	Leith
1925	150	54	Mrs H. Davidson	Gorgie
1926	120	69	Mrs L. Nimmo	Leith
1927	181	114	Mrs M. C. Renwick	High Street
1928	207	98	Mrs Anderson	Torphichen Street
1929	200	78	Mrs E. Gannie	Leith
1930	240	98	Mrs Paterson	Windsor Street
1931	242	134	Mrs Mark Reid	Stockbridge
1932	212	102	Mrs John Stevenson	Leith
1933	266	131	Mrs John Anderson	Torphichen Street
1934	303	164	Mrs Richardson	Elsie Inglis
1935	300	176	Mrs Robert Noble	Pleasance
1936	313	193	Mrs Scott	Portobello

TABLE 37.—MILK AND DINNERS.

The distribution of **Milk and Dinners** during the year was as follows :—

Milk—Assisted	. . . . .	128,245 pints
Free	. . . . .	970½ „
Dinners—Assisted	. . . . .	20,057
Free	. . . . .	...

TABLE 38.—DAY NURSERIES.

Day Nursery.	Attendances—Infants.	Attendances—Children.	Total Attendances.
Henderson Row	950	2,509	3,459
Dumbiedykes Road	1,681	4,664	6,345
Viewforth Terrace	406	3,947	4,353
South Fort Street, Leith	1,402	5,100	6,502
TOTALS	4,439	16,220	20,659
Figures for 1935	5,714	16,618	22,332

TABLE 39.—TODDLER PLAYGROUNDS.

CENTRE.	Number on roll.	Daily attend- ances.	CENTRE.	Number on roll.	Daily attend- ances.
Abbeyhill	32	24	Portobello	24	15
Barony Place	43	30	Stockbridge	35	30
Chessel's Court	20	15	Tollcross	52	35
Cowgate	35	18	Tron Square	43	33
Fountainbridge	26	18	Leith—Junction Street	29	18
High School Yards	30	23	Keddie Park	73	58
High Street	35	25	Links Place	34	25
Jamaica Street	26	19	Yardheads	86	70
Marshall Street	35	23	Granton	35	30
Pleasance	46	36	TOTALS	739	545

TABLE 40.—CHILD GARDENS AND NURSERY SCHOOLS.

Name.	Address.	Head Teacher.
Blind Asylum Nursery School	Craigmillar Park	Mr Anderson
Cameron House Nursery School	Cameron House Avenue	Miss Baird
Children's House	Wauchope Terrace	Miss Maynard
Deaf and Dumb Nursery School	7 and 8 Saxe-Coburg Place	Mr Sutcliffe
East Adam Street Nursery School	12 East Adam Street	Miss McLaren
Grassmarket Child Garden	The Vennel	Miss Riddell
Hope Cottage Child Garden	East Crosscauseway	Mrs Baxter
Lochrin Nursery School	Ponton Street	Miss Hair
Moray House Nursery School	174 Canongate	Miss Murray
Portobello Nursery School	Ramsay Lane	Miss Henderson
Princess Elizabeth Child Garden	14 Clearburn Crescent	Miss Laidlaw
Reid's Court Child Garden	3 Reid's Court, 95 Canongate	Miss Fairley
St Saviour's Child Garden	8 Chessel's Court, 240 Canongate	Miss Herdman
Stanwell Street Nursery School	Bonnington Road, Leith	Miss Mathams
Tynecastle Nursery School	McLeod Street	Miss Hamilton

VENEREAL DISEASES.

REPORT BY CLINICAL MEDICAL OFFICER.

The outstanding change in 1936 has been the transfer of the wards and clinics at the Royal Infirmary to the new pavilion which is shared with the Dermatology Department. The removal to the new building was completed in May. Naturally the transition stage was associated with many alterations and adjustments, but, on the whole, the work was continued with only minor interruptions.

The new accommodation was fully described in articles contributed to the "Edinburgh Medical Journal," the "British Journal of Venereal Diseases," and the "Surgeons' Hall Journal." The amenities of the wards and clinics are many, but the fact that the male ward and clinic now occupy different floors has created a new situation, which may necessitate additions to the nursing staff.

The photographs of the new pavilion and one of the rooms will convey a good idea of the modern treatment in architecture and of the up-to-date facilities provided. There is a noteworthy improvement in the heating arrangements of the wards, the temperature being maintained at the required level by radiators of a new panel type, fitted into the walls below the windows. The absence of heating pipes contributes greatly to the cleanliness in appearance and in fact. All corners are rounded to avoid the collection of dust, and the colour scheme with contrasting shades of cream or buff and green is particularly effective and restful to the eye. The corridors have recessed panel lighting, the rays from which are prevented from entering the wards at night and so disturbing the patients. A call and signal light system is arranged for the small two and one-bed wards.

In the out-patient clinics the patients are summoned from the waiting-rooms to the treatment rooms by numbered call and signal lights. In the irrigation and dressing station and in the injection rooms a sterile hot-water supply at constant temperature is laid on.

The ground floor plan is of interest from the point of view of modern clinic design, the lay-out of the office, waiting and treatment rooms being calculated to meet the special treatment needs of venereal disease cases.

The first floor includes a well-lighted 14-bed ward, two small two-bed wards and two one-bed wards with the usual offices, a convalescent and day-room where the up-patients take their meals, and, in addition, a lecture theatre. The ward has a balcony facing south and catching the sun in the earlier part of the day.

The second floor accommodates the female wards and the female out-patient department. The clinic rooms occupy the west-end of the floor, and are grouped and arranged to facilitate the speedy handling of large numbers of out-patients.

The fittings throughout the building and of the Waygood-Otis lift are of aluminium or chromium-plated, and the table-tops in the treatment and injection rooms are of



EDINBURGH CORPORATION VENEREAL DISEASES SCHEME.

The New Dermatology and Venereal Diseases Pavilion at Edinburgh Royal Infirmary.



EDINBURGH CORPORATION VENEREAL DISEASES SCHEME.

One of the Examination Rooms in the New Pavilion at Edinburgh Royal Infirmary.

stainless metal. These bright metal fittings add to the general impression of cleanliness, and the excellent lighting, heating and ventilation of the treatment rooms contribute still further to the comfort of patients and doctors alike.

The accommodation for in-patients has been increased by two male and two female beds in the Royal Infirmary, where the new male and the new female wards contain 14 beds each and the side wards provide respectively 6 and 4 additional beds. The in-patient accommodation, therefore, now comprises 38 beds in the Royal Infirmary, 24 beds and cots in the Northern General Hospital, 14 beds and cots in Bruntisfield Hospital and Elsie Inglis Memorial Maternity Hospital, and 14 beds and cots in the Royal Maternity and Simpson Memorial Hospital—a total of 90 beds and cots for in-patients.

During the year several improvements have been carried out in wards 5 and 6 of the Northern General Hospital, where provision is made for the treatment of women and children, especially mothers and babies. The treatment theatre was modernised by the removal of unsightly and projecting pipes and plumber work, and the installation of chromium-plated surgical taps for the wash-hand basin. Frequently the babies received are premature, and the heating accommodation is so arranged as to secure the even temperature necessary for such cases. The sanitary annexes were improved by the fitting of wash-hand basins for the up-patients and general renovation of the existing fixtures. Safe enjoyment of sunlight and fresh air in summer time was ensured to the children by the erection of a play-pen on the lawn immediately outside the wards.

New Patients.—As compared with the previous year, remarkably little change has taken place in the numbers of new patients. In order to aid comparison, the figures for 1936 are followed by the figures for 1935, the latter being in brackets. During 1936, the various centres received 3,835 (3,839) new patients, and of these 2,287 (2,322) reported to the out-patient clinics at the Royal Infirmary. At the beginning of the year 3,509 (3,507) patients who were still under treatment were included in the total number of patients under treatment during the year in all centres, viz., 7,344 (7,346). It is apparent, therefore, that the influx of new patients has remained extraordinarily constant. All the areas sharing the facilities of the Corporation Venereal Diseases Scheme, *e.g.*, Peebles-shire, Berwickshire, Roxburghshire and Selkirkshire, contribute to the total, but Edinburgh and the Lothians continue to supply most of the cases.

Of the total number of new patients, 2,540 (2,550) were found to be suffering from venereal infection, and the incidence of the various forms of disease was as follows :

Syphilis	695	(647)	...	27.3 (25.3)	per cent.
Gonorrhœa	1,280	(1,246)	...	50.4 (49.0)	..
Chancroid	27	(44)	...	1.1 (1.7)	..
Non-Specific Venereal Disease .	538	(613)	...	21.2 (24.0)	..

Genital or other lesions not classifiable under the above headings accounted for the remaining number of new patients. Prophylaxis is carried out where possible, and the services of the clinic are always available for any who wish to be tested prior to marriage, emigration or medical examination for the National Services.

In-Patients.—The total number of in-patients for the year was 1,278, which represents an increase of no less than 20 per cent. on the previous year. The admissions to hospital were distributed among the various institutions as follows :—

	Men.	Women and Children.	Total.
Royal Infirmary	305	195	500
Municipal Hospitals . . . . .	...	244	244
Bruntsfield Hospital . . . . .	...	33	33
Elsie Inglis Memorial Hospital . . . . .	...	*231	231
Royal Maternity Hospital . . . . .	...	*270	270
	305	973	1,278

* Included in these figures are the number of children born to mothers under treatment.

NUMBER OF BIRTHS.

Elsie Inglis Memorial Hospital	91
The Royal Maternity Hospital	122

The increase in in-patients is not wholly accounted for by the additional beds provided, but reflects several noteworthy changes.

In dealing with female cases of severe gonorrhœa or syphilis, a spell of intensive treatment in hospital is of enormous benefit in shortening the duration of subsequent out-patient attendances and in minimising the risk of complications which are particularly likely to occur at the menstrual periods.

Secondly, the 53 per cent. increase in the Municipal Hospital in-patients is accounted for by the more careful interpretation of the ophthalmia neonatorum regulations and the consequent transfer to the Northern General Hospital of any case of inflammation of the eyes in babies, even though the inflammation at first be slight.

Thirdly, the 17 per cent. increase in the patients admitted to the two maternity hospitals indicates that greater advantage is being taken of the antenatal clinics, and that the benefits accruing from antenatal observation are being recognised. The increasing interest in antenatal examination and care will unquestionably result in a diminished incidence of congenital syphilis and ophthalmia neonatorum. The number of children born in the special wards of the maternity hospitals has increased by 14 per cent., and those children whose mothers have had antenatal care are in most cases protected from infection.

Out-Patient Attendances.—The total out-patient attendances for the year numbered 124,657, of which 89,386 attendances were made by male patients and 35,271 by women and children. The detailed attendances at the various out-patient clinics were as follows :—

Royal Infirmary, Male Department	69,783
Royal Infirmary, Female Department	18,347
Municipal Clinics	2,854
Bruntsfield Hospital and Dispensaries	10,860
Royal Maternity Hospital	3,210
Seamen's Dispensary, Leith	19,603

Syphilis.—Cases of syphilis for the year numbered 695, an increase of 7 per cent. on the figure for 1935. The number of children born of syphilitic parents was 167; not all of these are cases of congenital syphilis, but all are kept under observation for a prolonged period. Impairment of vision through interstitial keratitis or chorio-iritis due to congenital syphilis is now much less frequently encountered. A few years ago such cases were common in the Eye Departments, but are now fortunately becoming relatively rare. All the various Public Health Departments co-operate in the detection of congenital syphilis, and children suspected to be suffering from this form of infection are reported from the maternity hospitals, the Child Welfare Department, and the School Medical Service. The parents of congenital syphilitic children are tested and treated, and the mothers are kept under observation so as to ensure their getting treatment during each subsequent pregnancy.

Gonorrhœa.—New cases of gonorrhœa total 1,280 this year as against 1,246 for 1935, and constitute 50·4 per cent. of the total number of infected new patients. The increase in these cases is not large, but nevertheless significant in view of the circumstance that a considerably increased incidence has been reported from other parts of Scotland.

There are many difficulties which impede our efforts to stamp out this highly prevalent disease. One of the chief of these difficulties is the fact that in women in the early stages the symptoms are often extremely slight, and many women in apparently good health are carriers of the causal organism. Instances of such cases could be multiplied and not infrequently it is impossible by naked-eye examination alone to state that gonorrhœal infection is present; recourse must be made to microscopical examination to prove or disprove infectivity.

Another difficulty is that contraception is practised on an enormous scale, and that such measures give an impression of security against infection which may not be justified.

From the viewpoint of prevention, many advances could be made. One of the most desirable features of a progressive constructive policy would be the provision of a hostel for the reception of infected girls. To remove such girls from the streets during the period of infectivity would mean the removal of a fertile source of spread of infection.

Ophthalmia Neonatorum.—During the year 92 infections were notified. Of these cases 13 (14 per cent.) were due to gonococcal infection.

There were four cases with partial loss of vision. In two cases there was serious loss of vision of one eye only; in the other two cases the damage was slight and confined to one eye. In each of these instances there was delay in sending the infant to the special treatment centre at the Northern General Hospital. As an essential feature of the early treatment is the washing out of the eye every half-hour day and night, a delay of even a few hours is a vitally important factor in allowing an inflammation of the eye to progress to the production of ulceration of the cornea. In this connection it must be emphasised that the proper procedure in these cases consists, firstly, in immediate notification to the Medical Officer of Health, secondly, in facilitating the

immediate removal of both child and mother to the Northern General Hospital. Prompt notification leading to speeding-up the admission to hospital of all cases of eye inflammation in babies under three weeks old is the prime desideratum and any administrative measures designed to secure it would find ample justification.

In addition to the 92 cases notified in the Edinburgh area, 25 cases of suspected ophthalmia neonatorum coming from areas outside Edinburgh were investigated. All these cases were treated in hospital, and 2 (8 per cent.) gave positive tests for gonococcal infection. Prompt hospitalisation was carried out in all these cases, with the result that there was no loss of vision.

Vulvo-Vaginitis.—The cases of vulvo-vaginitis for the year numbered 21, approximately half the number treated in 1935, and less than half the average number for the past ten years. This inflammation of the genitals in young female children is in most cases due to gonococcal infection and the marked decrease in the incidence indicates that adults infected with gonorrhœa are seeking advice earlier and are profiting from the warnings about the infectivity of discharges and how to avoid spread of infection. Improved housing conditions with the steady lessening of overcrowding and better sanitary facilities must also exert an influence in preventing the contiguity which favours accidental infection.

Chancroid.—Cases of chancroid numbered 27, only about half the number reported in 1934. This condition is commoner in tropical countries and may be introduced by sailors into such ports as Leith. The routine use of Reenstierna's intradermal test has facilitated the diagnosis of these cases and the treatment has been improved by the exhibition of Dmelcos vaccine—a suspension of Ducrey's bacillus.

Non-Specific Venereal Infection.—The number of new cases classified under this heading was 538, corresponding to 21·2 per cent. of the total. As previously, this group includes non-syphilitic ulceration, lymphogranuloma inguinale (climatic bubo) balanitis, non-gonorrhœal urethritis and venereal warts.

During the year 8 cases of climatic bubo were investigated and treated. All these cases gave strongly positive reactions to diagnostic intradermal injections of Frei's antigen, and this series of cases was fully described in an article contributed to the "Edinburgh Medical Journal."

Laboratory Work.—The greater part of this work is done in the Bacteriology Department of the Royal Infirmary, under the direction of Dr. Logan. The serological and bacteriological tests sent in from the Municipal Hospitals and control flocculation tests are dealt with in the University Bacteriology Department under the direction of Professor Mackie. The value of the help and guidance given to clinical workers by these most excellent laboratory services cannot be over-estimated and it is a pleasure to acknowledge with gratitude the assistance which they so constantly afford.

The number of specimens examined during the year was 47,402, of which 40,594 came from the Venereal Diseases Departments of the City, 5,802 from wards of the Royal Infirmary, and 1,006 from other Institutions and general practitioners.

Treatment.—It is of interest to record that the more intensive methods adopted in the treatment of early syphilis have not resulted in an increased number of cases of intolerance.

During the year, several new preparations for which certain advantages were claimed have been subjected to clinical trial. Among these new preparations were the "Crylarsan" brand of neocryl and mapharside. Neocryl has been advocated as a substitute for tryparsamide in the treatment of neurosyphilis and is described as having low toxicity; these claims are under investigation.

Throughout the year extensive use has been made of malarial therapy, and this therapeutic procedure has resulted in marked clinical improvement in many of the cases of neurosyphilis in which it has been applied; not only has the progress of general paralysis been arrested, but mental and physical well-being and a considerable measure of efficiency have been regained. Colonel Greig, University lecturer on Tropical Diseases, has continued to supervise all the malarial cases, and has reported from day to day on the number of parasites present in the blood. In this way the intensity of the infection has always been under control, and the rigors were stopped when a high parasite count or a drop in the blood pressure rendered this necessary. Colonel Greig's expert advice has been most valuable, and it is a pleasure to acknowledge his assistance and encouragement.

In the treatment of gonorrhœa the results obtained from the use of various chemotherapeutic agents have been compared with those recorded in vaccine-treated cases. The drugs used in this way included various derivatives of acriflavine and preparations of sulphonamide. The acriflavine compounds were given intravenously and orally, in addition to the usual routine irrigations, and the results so far have been encouraging in respect of a low incidence of complications in early cases, also in the accelerated resolution of complications such as prostatitis, seminal vesiculitis, epididymitis and arthritis in the male, and, in the female, cervicitis, salpingitis and arthritis. Certain acriflavine compounds were tried out several years ago, but their use was hampered by their tendency to cause jaundice. On behalf of the newer preparations it is claimed that improved methods of manufacture have resulted in reducing toxicity and in particular in minimising liability to production of jaundice. This claim seems to be borne out in practice; so far no case of jaundice has occurred, but the investigation is still proceeding.

The sulphonamide compounds, prontosil and proseptasine, have been used with success in gonorrhœal mixed infections where hæmolytic streptococci were also present, e.g., in certain cases of arthritis, and in recent gonorrhœal infections superimposed upon stricture of the urethra.

As in previous years, the Special Departments, and in particular the Eye Department, have been frequently consulted. Doctors Traquair and Cameron and their staffs have assessed the extent of visual impairment in all the cases of ophthalmia neonatorum with corneal ulceration, and their findings have been incorporated in the reports rendered to the Department of Health. The advice and help received have been much appreciated.

Cases of multiple and continued venereal infection have often a background of psychological incapacity, and Professor D. K. Henderson and his staff have frequently co-operated in the disposal and treatment of cases of psychosis. A spell of treatment in Jordanburn nerve hospital has frequently proved of great value in correcting the mental instability which results in repeated venereal infection.

Results of Treatment.—During the year 2,805 patients were discharged as cured, 602 were transferred to other centres, and 3,487 were still under treatment at the end of the year.

As compared with 1935, the number of patients cured shows an increase of 3 per cent. The adoption of more intensive therapy for early syphilis and chemotherapy for gonorrhœa has shortened the duration of treatment and enabled patients to be discharged sooner than was possible formerly.

The results of antisyphilitic treatment are strikingly apparent in the markedly diminished occurrence of loss of sight or hearing, due to congenital syphilis. It is also noteworthy that the vast majority of the cases of syphilis of the central nervous system, resulting in general paralysis of the insane, hemiplegia and locomotor ataxy, date back to before the inauguration of the Corporation Venereal Diseases Scheme in 1920. The early institution of modern intensive treatment methods has in almost every case of syphilis prevented involvement and destruction of the brain and spinal cord cells.

In the case of gonorrhœa, clinic treatment in the male is greatly reducing the number of cases of urethral stricture, with all its disabling consequences, such as cystitis and pyelitis, and also cases of chronic arthritis or iritis. In the female, disablement from chronic disease of the pelvic organs—cervicitis, salpingitis and parametritis—is prevented, and spread of infection giving rise to ophthalmia neonatorum and vulvovaginitis is minimised.

In other venereal diseases, *e.g.*, lymphogranuloma inguinale, early treatment is checking the production of disastrous sequelæ such as, in lymphogranuloma inguinale, stricture of the rectum and chronic recto-vaginal fistulæ.

Percentage Continuing at Treatment Until Considered Cured.—It is gratifying to record once more a drop in the number of defaulters—450 as against 513 in 1935. The percentage continuing treatment is 77·4.

Considering the demands on the patients' time made by the long continued treatment which is still so necessary, especially in syphilis, the steadily decreasing number of those who fail to attend is of importance in indicating the measure of success achieved by the voluntary system, and in assessing the need for any departure from it in the direction of compulsion.

In the chapter devoted to venereal diseases in the report of the Committee on Scottish Health Services published during the year, the conclusion is reached that "the failure of large numbers of patients to continue treatment to a conclusion is the most serious obstacle to the wider success of the schemes," and a majority of the Com-

mittee are, therefore, in favour of the compulsory notification of syphilis, and "of empowering Local Authorities to require infected persons to undergo treatment until they are no longer a danger to others." This proposal obviously presupposes the existence of treatment facilities sufficiently convenient as not to impose on patients a serious burden of loss of time. In this connection it is pertinent to ask whether treatment facilities, even in the large towns, are sufficiently adequate to render compulsion justifiable, and in answering this question it must be stated that there is a definite lack of subsidiary centres where frequent daily treatment such as irrigations, local applications or dressings could be provided. These subsidiary centres should have the cover afforded by a building supplying other public health services, and should be distributed throughout the new housing areas which are becoming so widely spread that a journey thrice daily to the main centre is too much to expect, and in fact would occupy the greater part of a patient's time. To enforce the regulations, attendance at the main centre in such cases would mean the imposition of an amount of restraint inconsistent with the retention of almost any form of employment. That patients should lose their employment through having to attend for treatment is to be avoided by every possible means. If the facilities are reasonably convenient, the active and eager co-operation of the patient can be secured in the vast majority of cases, and a willing volunteer is much more likely to be cured quickly than a conscript. In fact, the effective co-operation of the patient is one of the main factors in the success of treatment.

The conclusion is reached, therefore, that the possibilities of the present voluntary system have not been fully explored, far less exhausted.

Follow-up Work.—During 1936, the nurse almoner and the nurse attached to the Hospital for Women and Children paid 2,881 visits to patients in their homes, dealing with 1,084 cases and resulting in the return for treatment of 937 (86·5 per cent.).

The high percentage of women and children returning to the clinics as a result of this specialised visiting, indicates the great value of follow-up work in securing regularity of attendance for treatment, especially of women and children. While accomplishing this prime desideratum, opportunities frequently present themselves of aiding necessitous cases by supplying such wants as clothing, extra nourishment, extra fuel or financial assistance. The nurse almoner acts as a confidant and adviser in the manifold domestic difficulties which crop up in conjunction with venereal diseases work, and she is a potent influence in alleviating physical and mental distress in the patients' homes. To particularise, in cases where attendance at the clinics has resulted in dismissal from employment, an endeavour must be made to have the patient reinstated, and these efforts are usually crowned with success.

The Corporation Venereal Diseases Scheme still lacks a hostel where infected girls could have prolonged supervision and treatment. Many of these girls have no certain way of earning a livelihood other than by prostitution, and a hostel would provide a happy atmosphere, variety of work, and normal hours of leisure to girls to whom a happy home life has never been known. The importance and enormous success of the hostels provided by the London County Council is emphasised in a special memorandum of evidence furnished to the Departmental Committee by the British Social Hygiene

Council. Occupation classes have been instituted for women venereal disease patients, and these have been, to quote the report, "almost too much of a success." The girls "stay in the hostels and complete their cure as they never did before, because they are interested and happy. Most of those attending the occupation classes are prostitutes. Some are domestic servants. Each girl is seen as soon as possible after admission by a rescue worker of her own denomination, who keeps in touch with her during her stay and tries afterwards to get her placed in a situation." "In consequence of the excellent arrangements made, and the pleasant atmosphere of the hostels, there is no trouble with girls going out prematurely. It is extraordinary the way they will stay." The memorandum concludes by stressing that "the psychology of the patient requires study as well as the morbid physical condition, an aspect which is apt to be overlooked."

It is a pleasure to testify to the help received from the other social service organisations in the City, especially the almoners' department of the Royal Infirmary, the Public Assistance Department and the Probation Officers.

Seamen's Dispensary, Leith.—The new patients reporting to this centre numbered 303 as against 293 for the previous year, and the total attendances were 19,603 as against 19,987 in 1935.

The continued success of this subsidiary clinic shows that it is helping to satisfy the need already referred to for small clinics in various parts of the City. Those patients who reside in the neighbourhood find it much more convenient to attend at the Seamen's Dispensary than to make frequent journeys to the main centre.

This dispensary at the docks deals also with infected seamen from foreign countries in accordance with the International agreement for reciprocity in providing treatment.

Statistical Tables.—A series of tables appended to this report show in tabular form the work of the Department during the year.

Medical, Nursing and Clerical Staffs.—Dr. Mary Liston, senior assistant in the female department, retired in January, 1936. The great value of her services during her 14 years' tenure of office was placed on record and suitably recognised in the form of a testimonial and presentation proffered to Dr. Liston by her colleagues and former assistants.

Dr. Helen Muir acted as locum from January to October, 1936, and carried on the work with distinct success during the difficult transition period when the Department was transferred to the new building. Thereafter Dr. Muir was appointed to the staff of the Medical Officer of Health of Swansea.

In October, 1936, the vacancy created by Dr. Liston's retirement was filled by the appointment of Dr. Marjorie Murrell, who has already given evidence of consistent endeavour towards progress and improvement.

In conclusion, it is a pleasure to express appreciation of the work done by all members of the medical, nursing and clerical staffs and to acknowledge with thanks their continued co-operation.

EDINBURGH CORPORATION VENEREAL DISEASES SCHEME.

ROYAL INFIRMARY CLINIC.

REPORT FOR THE YEAR ENDING 31st DECEMBER, 1936.

Number of New Cases Attending :—

	EDINBURGH.		OTHER AREAS IN SCHEME.		OTHER AREAS OUTSIDE SCHEME.		AREAS OUTSIDE SCOTLAND.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
January . .	110	38	26	4	15	6	2	...
February . .	96	41	17	5	12	1	4	1
March . .	87	34	18	4	20	3	1	...
April . .	97	26	17	6	15	11	2	...
May . .	91	40	12	17	9	9	5	...
June . .	86	30	18	5	13	6	4	...
July . .	95	38	21	13	24	1	1	...
August . .	117	58	19	19	22	4	5	1
September . .	91	42	24	8	17	11	4	...
October . .	90	36	20	14	13	9	1	...
November . .	112	37	24	3	15	14	1	...
December . .	98	37	33	6	14	7	2	2
Totals . .	1,170	457	249	104	189	82	32	4

EDINBURGH	1,627
Other Areas in Scheme	353
Other Areas outside Scheme	271
Areas outside Scotland	36
Grand Total	<u>2,287</u>

Of the New Cases Attending there were :—

EDINBURGH.

	MALES.					FEMALES.				
	Syphilis.	Gonorrhœa.	Soft Sore.	N.S.D.	No. V.D.	Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.	
January .	13	42	1	19	35	13	13	6	6	
February .	13	41	...	13	29	12	23	2	4	
March .	10	23	...	23	31	10	15	4	5	
April .	16	42	...	22	17	4	16	1	5	
May .	12	38	1	13	27	7	20	6	7	
June .	14	30	...	16	26	8	12	3	7	
July .	13	33	1	21	27	14	14	2	8	
August .	15	53	...	25	24	15	20	10	13	
September	10	36	2	20	23	13	21	1	7	
October .	18	36	1	15	20	13	13	2	8	
November	17	37	3	28	27	10	9	7	11	
December	9	38	1	24	26	12	11	2	12	
Totals	160	449	10	239	312	131	187	46	93	

OTHER AREAS IN SCHEME.

	MALES.					FEMALES.				
	Syphilis.	Gonorrhœa.	Soft Sore.	N.S.D.	No. V.D.	Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.	
January .	1	11	...	7	7	...	1	...	3	
February .	2	5	...	4	6	3	2	...	...
March .	2	7	...	4	5	3	...	1	...	
April .	3	3	1	4	6	3	1	2	...	
May .	2	5	...	...	5	6	5	1	5
June .	4	6	...	3	5	...	5	...	...
July .	4	7	1	3	6	5	4	1	3	
August .	2	7	...	2	8	8	3	...	8	
September .	4	12	...	3	5	2	5	...	1	
October .	3	9	...	3	5	7	3	...	4	
November .	3	4	...	10	7	1	1	...	1	
December .	7	14	2	3	7	2	3	...	1	
Totals	37	90	4	46	72	40	33	5	26	

OTHER AREAS OUTSIDE SCHEME.

	MALES.					FEMALES.				
	Syphilis.	Gonorrhœa.	Soft Sore.	N.S.D.	No. V.D.	Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.	
January .	6	5	...	2	2	1	3	...	2	
February .	4	2	...	3	3	...	1	...	...
March .	10	4	...	1	5	1	...	1	1	
April .	4	4	...	3	4	3	4	3	1	
May .	1	3	1	3	1	4	3	2	...	
June .	3	4	...	2	4	3	2	...	1	
July .	10	6	...	3	5	...	...	...	1
August .	7	5	...	6	4	1	2	...	1	
September	7	4	...	2	4	4	6	1	...	
October .	4	3	...	4	2	6	3	...	...
November	1	8	...	1	5	5	1	2	6	
December	3	4	...	3	4	4	...	...	3
Totals	60	52	1	33	43	32	25	9	16	

AREAS OUTSIDE SCOTLAND.

MALES.						FEMALES.			
	Syphilis.	Gonorrhœa.	Soft Sore.	N.S.D.	No. V.D.	Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.
January .	...	1	...	1	...	...	...	...	...
February .	...	3	...	...	1	...	...	...	1
March .	...	1	...	...	...	...	...	...	...
April .	...	1	...	...	1	...	...	...	...
May .	...	4	...	...	1	...	...	...	...
June .	2	2	...	...	...	...	...	...	...
July .	...	...	...	...	1	...	...	...	...
August .	1	1	...	1	2	1	...	...	...
September	...	3	...	...	1	...	...	...	...
October .	...	1	...	...	...	...	...	...	...
November	...	1	...	...	...	...	...	...	...
December	...	1	...	...	1	1	...	...	1
Totals	3	19	...	2	8	2	...	...	2
Grand Totals	260	610	15	320	435	205	245	60	137
1,640				647					
2,287									

AGE PERIODS.

	MALES.					FEMALES.			
	Syphilis.	Gonorrhœa.	Soft Sore.	N.S.D.	No. V.D.	Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.
Under 1 yr. . .	...	...	...	...	...	5	2	1	9
1-4 yrs. . .	...	...	...	...	...	7	5	...	19
5-14 yrs. . .	5	1	...	...	3	14	3	1	34
15-24 yrs. . .	33	168	7	77	86	42	107	21	25
25 yrs. up . .	222	441	8	243	346	137	128	37	50
Totals	260	610	15	320	435	205	245	60	137

Admissions to Hospital :—

	MALES.					FEMALES.			
	Syphilis.	Gonorrhœa.	Soft Sore.	N.S.D.	No. V.D.	Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.
Edinburgh	49	93	...	36	2	50	59	9	4
Other Areas in Scheme	21	37	1	20	2	10	14	5	2
Areas outside Scheme .	15	18	...	11	...	19	16	3	1
Areas outside Scotland	...	...	...	...	...	3	...	...	...
Totals	85	148	1	67	4	82	89	17	7
	<u>305</u>					<u>195</u>			

Discharges from Hospital :—

	MALES.					FEMALES.			
	Syphilis.	Gonorrhœa.	Soft Sore.	N.S.D.	No. V.D.	Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.
Edinburgh .	49	89	...	35	2	46	52	13	4
Other Areas in Scheme	17	32	1	21	2	12	11	5	1
Areas outside Scheme .	13	16	...	8	...	16	14	2	...
Areas outside Scotland	...	...	...	...	...	2	...	...	...
Totals	79	137	1	64	4	76	77	20	5
	<u>285</u>					<u>178</u>			

SPECIAL TREATMENT ADMINISTERED.

Number of Intravenous and Intramuscular Injections given :—

	Neokharsivan.	Kharsulphan.	Bismuth.	Other Drugs.	Total.
January . . .	269	220	1,261	738	2,488
February . . .	328	301	1,383	738	2,750
March . . .	319	322	1,341	773	2,755
April . . .	294	250	1,228	709	2,481
May . . .	375	287	1,257	789	2,708
June . . .	400	288	1,272	759	2,719
July . . .	340	228	1,113	937	2,618
August . . .	339	153	1,015	976	2,483
September . . .	358	208	1,152	1,048	2,766
October . . .	441	222	1,308	1,161	3,132
November . . .	317	202	1,240	1,161	2,920
December . . .	429	184	1,266	1,091	2,970
Totals . . .	4,209	2,865	14,836	10,880	32,790

PATHOLOGICAL WORK.

Number of Specimens examined :—

	Blood Wass.	C.S.F. Wass.	Other C.S.F. Tests.	G.C.F.T.	D.Gs.	Smears.	Others.	Total.
January . . .	773	30	90	304	12	974	66	2,249
February . . .	743	12	36	436	12	1,052	78	2,369
March . . .	732	11	33	364	12	903	64	2,119
April . . .	646	9	27	293	20	889	55	1,939
May . . .	697	18	54	302	12	933	162	2,178
June . . .	617	17	51	331	12	866	146	2,040
July . . .	613	26	78	276	12	829	107	1,941
August . . .	728	23	69	342	48	770	110	2,090
September . . .	640	15	45	300	30	784	169	1,983
October . . .	555	28	84	321	18	893	82	1,981
November . . .	709	36	108	378	24	1,136	72	2,463
December . . .	696	21	63	326	8	998	168	2,280
Totals . . .	8,149	246	738	3,973	220	11,027	1,279	25,632

Total Attendances at the Clinic for Routine Dressings, etc. :—

	Males	Females.	Total.
January . . .	6,136	1,408	7,544
February . . .	6,199	1,286	7,485
March . . .	6,149	1,518	7,667
April . . .	4,601	1,380	5,981
May . . .	5,153	1,414	6,567
June . . .	5,446	1,420	6,866
July . . .	6,084	1,475	7,559
August . . .	6,314	1,606	7,920
September . . .	5,724	1,546	7,270
October . . .	6,330	1,864	8,194
November . . .	5,708	1,690	7,398
December . . .	5,939	1,740	7,679
Totals . . .	69,783	18,347	88,130

OTHER TREATMENT CENTRES IN EDINBURGH.

1. Subsidiary Centres for Royal Infirmary.

Number of New Cases 312

Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.
50	139	11	112 = 312

Number of Patients treated in Hospital 244

Total Attendances of Out-patients 2,854

Pathological Work—Number of specimens examined 1,540

Special Treatment administered—Number of Injections given 3,194

2. Hospital for Women and Children and Subsidiary Centres.

Number of New Cases 567

Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.
90	46	120	311 = 567

Number of Patients treated in Hospital 264

Total Attendances of Out-patients 10,860

Pathological Work—Number of specimens examined 8,066

Special Treatment administered—Number of Injections given 2,374

3. Royal Maternity Hospital.

Number of New Cases 366

Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.
39	100	2	225 = 366

Number of Patients treated in Hospital 270

Total Attendances of Out-patients 3,210

Pathological Work—Number of Specimens examined 3,598

Special Treatment administered—Number of Injections given 509

4. Seamen's Dispensary, Leith.

Number of New Cases 303

Syphilis.	Gonorrhœa.	Soft Sore.	N.S.D.	No. V.D.
51	140	12	25	75 = 303

Total Attendances of Out-patients 19,603

Pathological Work—Number of Specimens examined 1,758

Special Treatment administered—Number of Injections given 1,816

MUNICIPAL GENERAL HOSPITALS.

REPORT BY MEDICAL SUPERINTENDENT OF HOSPITALS.

The following is a report on the work carried out in the Municipal General Hospitals for the year 1936. Progress is evident in most Departments.

In 1932 the standard of efficiency of the Municipal General Hospitals was raised by the formation of units for treatment and teaching. Adult medical, surgical, obstetrical and gynæcological cases have since then received careful and intensive examination and treatment. The closer collaboration between the clinicians in attendance on the patients and the Departments of Bacteriology, Pathology and Biochemistry, made possible through the arrangements with Edinburgh University, has produced still greater efficiency in the treatment of the patients. Another step forward has been taken during 1936; under the Council's scheme for the replacement of the present hospital buildings by new buildings, a nurses' and domestics' Home was begun in February and will probably be completed in 1937. The Home is four storeys high, built of ferro-concrete and brick, on a site to the north of the present hospital buildings constituting the Western General Hospital. Accommodation will be provided for 160 nurses and 50 domestics. An efficient nursing ratio will then be possible.

A new mortuary is almost completed at the Eastern General Hospital.

The work of the hospitals during the year under review has again increased. More cases have been treated. In 1935 the number treated was 6,425, and in 1936 the number has risen to 7,339. The more chronic cases were treated in the Northern and Eastern General Hospitals. The Western General Hospital has, as in the past, been reserved for the treatment of surgical, maternity, acute medical cases and children. Of the patients treated in that hospital, 37·6 per cent. were children. As in 1935, a percentage of children suffering from contagious skin diseases have been treated in the Northern General Hospital.

As in previous years, the work of the hospitals is set out in the form of statistical tables and analyses. Last year, a comparison was made showing the increase in the totals of patients treated in the three hospitals. This year, a comparison is made of Special Departments in the Western General Hospital, viz., surgical, maternity and X-ray :—

	<i>Surgical Operations.</i>	<i>Maternity Cases treated.</i>	<i>X-ray Examinations.</i>
1933	517	181	314
1934	887	241	1,167
1935	901	521	1,853
1936	1,000	486	2,277

Other Special Departments in the Western General Hospital show similar progress. As a comparison, last year's numbers and this year's numbers are given below :—

	<i>Urological Cases.</i>	<i>Ear, Nose and Throat Operations</i>	<i>Massage Cases.</i>	<i>Special Diet Cases.</i>
1935	121	136	2,689	98
1936	166	180	4,142	119

At the Western General Hospital, the greatest number of patients sought treatment for surgical conditions. Diseases or conditions of the abdominal organs were the most numerous of the defects requiring surgical aid, and next in order came the diseases of the upper air and food passages, and third, affections of the genito-urinary system. Medical cases sought treatment chiefly for diseases of (1) respiratory, (2) circulatory, and (3) digestive systems, all more or less acute.

The patients in the Eastern General Hospital and the Northern General Hospital were chiefly treated for chronic diseases and disorders of the nervous, respiratory and circulatory systems, in the order named.

Fewer patients were treated in Craiglockhart Institution during the year, but owing to the character of the illnesses, the work done by the nursing staff was heavier than in former years.

The highest number of healthy children resident in Craighleith Children's Home was 103, and the lowest number was 62, the average being 84. During the year, 63 children were boarded out. There were slight epidemics of chickenpox and whooping-cough, and other infectious cases were measles and mumps.

During the year, healthy infants have been transferred from the children's section of the Western General Hospital to Bruntsfield House. The wards vacated by these healthy children have been made into a new and larger maternity section and the former maternity section is now an admission group of wards for adults. The children's wards are now all on the ground floor, giving easy access for out-of-doors treatment, and a separate group of three wards has been set aside for the treatment of children's skin diseases.

Arrangements are being made for the Biochemical Department to be transferred to the Western General Hospital, from the University Buildings. This work is steadily increasing. It is closely associated with the clinical or bedside treatment, and will, it is hoped, prove even more useful when carried out in the hospital. During the past nine months, the lay Clinical Assistant has made almost 1,000 special investigations—30 examinations of basal metabolic rates, 745 complete blood counts, and she has taken 178 electrocardiograms.

Professor W. T. Ritchie has been succeeded by Professor D. Murray Lyon as Director of the Medical Unit.

The following research work has been carried out in the surgical and medical units :—Mr Bruce Dick has continued his investigations into the surgical treatment of thoracic disease. Mr David Band has investigated the treatment of prostatic obstruction by surgical and other methods. An investigation has also been made into the prevention and treatment of post-operative retention of urine, with very satisfactory results.

In the Medical wards, Dr. Easton has been making a special investigation into the peripheral circulation in cases of chronic rheumatism.

At the Eastern General Hospital a library service has been organised and at the Northern General Hospital brabazon work. A weekly visit is made by the ladies who give this voluntary and greatly appreciated service.

There has been no marked epidemic during the year. The sickness rate among probationer nurses and domestics has been about the average. This year, 16 nurses passed the Final State Examination and 4 passed the First State Examination.

Probationer nurses have been difficult to get for all the hospitals. The shortage of candidates has been most apparent for the chronic hospitals, which are not Training Schools. Many young probationers tend to give up their training when faced with the daily physical and mental strain of dealing with refractory, irritable and completely helpless chronic sick persons.

All members of the hospital staffs deserve our thanks for their zealous service.

WESTERN GENERAL HOSPITAL.

Structural Alterations : A new Nurses' Home being built.

STATISTICS FOR THE YEAR 1ST JANUARY TO 31ST DECEMBER, 1936.

		Remaining 1st January.	Admitted.	Discharged.	Died.	Remaining 31st December.
Adults	{ Males . .	57	827	661	169	54
	{ Females . .	73	1,427	1,323	111	66
Children	{ Males . .	63	738	710	40	51
	{ Females . .	58	582	562	38	40
Totals		251	3,574	3,256	358	211

Number of Cases treated 3,825.

TABLE TO SHOW THE RESULTS OF TREATMENT OR TERMINATION OF ILLNESS.

Cured	1,869	Not Improved	345
Improved	1,042	Died	358
Remaining under treatment			211

CAUSES OF DEATH.

	<i>Adults.</i>		<i>Children.</i>	
	<i>Males.</i>	<i>Females.</i>	<i>Boys.</i>	<i>Girls.</i>
1. Infectious and Parasitic Diseases	12	13	...	1
2. Cancer and Other Tumours	35	17	...	1
3. Rheumatism, Diseases of Nutrition and other General Diseases	2	3	...	...
4. Diseases of the Blood and Blood-forming Organs	1	3	...	...
5. Chronic Poisoning	2	...	...	...
6. Diseases of Nervous System and Sense Organs .	16	7	2	1
7. Diseases of Circulatory System	28	20	...	...
8. Diseases of Respiratory System	29	13	9	11
9. Diseases of Digestive System	17	10	4	8
10. Non-Venereal Diseases of Genito-Urinary System	25	13	1	1
11. Diseases of Pregnancy and Childbirth . . .	...	5	...	...
12. Diseases of Skin and Cellular Tissue . . .	...	...	...	...
13. Diseases of Bones and Organs of Locomotion .	1	3	...	...
14. Congenital Malformations . . . . .	...	...	7	2
15. Diseases of Early Infancy . . . . .	...	...	16	12
16. Senility . . . . .	...	1	...	...
17. Deaths from Violence	1	3	1	1
	<u>169</u>	<u>111</u>	<u>40</u>	<u>38</u>

Total Beds	302
Average number of occupied beds . . .	232
Average length of stay, in days, per patient	25
Highest daily number of patients . . .	293 on 27.1.36
Lowest " " " " " "	177 on 1.8.36

SPECIAL DEPARTMENTS.

SURGERY.

During the year 1000 operations were performed ; 679 of these were major operations and 321 minor operations. A general anæsthetic was administered in 829 operations, 41 operations were carried out with a spinal anæsthetic, and 130 operations were performed under local anæsthesia, or without an anæsthetic.

CLASSIFICATION OF OPERATIONS.

1. Operation on brain, spinal cord, and peripheral nerves .	6
2. " lymph glands	37
3. " upper air and food passages	176
4. " breast and thorax	89
5. " abdomen	317
6. " genito-urinary organs	151
7. " bones and joints (including amputation) .	86
8. Various unclassified operations	138
	<u>1,000</u>

UROLOGICAL DEPARTMENT.

Examinations (Cystoscopic and Pyelographic)	142
Operations (Transurethral resection of prostate, Fulguration of tumours, Lithotripsy, etc.)	24
	<hr/> 166 <hr/>

CLASSIFICATION OF SURGICAL CASES TREATED ON ADMISSION.

1. Diseases of brain, spinal cord and peripheral nerves	5
2. „ lymph glands	40
3. „ blood vessels (including gangrene)	62
4. „ tongue and jaws, upper air and food passages	119
5. „ breast	53
6. „ thorax	61
7. „ abdominal organs	401
8. „ urinary and genital organs	170
9. „ female pelvic organs	75
10. „ bones and joints	161
11. „ skin and cellular tissue	67
12. Primary cardiac failure and surgical trauma	...
13. Various unclassified diseases	63
(Included in above are 93 children.)	<hr/> 1,277 <hr/>

EAR, NOSE AND THROAT DEPARTMENT.

Total number of operations	180
Operations on tonsils and adenoids	154
„ for mastoid, etc.	9
„ on nose and throat	17
Operations under general anæsthesia	153
„ under local anæsthesia	27
	180

Forty patients were examined without operation.

DENTAL DEPARTMENT.

Number of patients treated, adults 117 ; children 59	176
„ treatments requiring a general anæsthetic	173
„ treatments requiring a local anæsthetic	3
„ extractions	173
Other dental work (no anæsthetic)	3

The above includes cases from Craigmyle Children's Home and Craiglockhart Institution.

X-RAY DEPARTMENT.

The total patients examined during the year was 2,277, entailing sometimes more than one examination per patient.

Barium Meals and Enemata	298
Maternity Patients X-rayed	54

MATERNITY DEPARTMENT.

Number of cases treated	486
„ „ admitted (includes 14 babies with mothers)	475
„ „ discharged	468
„ „ delivered (300 normal, 48 abnormal) .	348
„ post-partum puerperal admissions	14
„ deaths—Mothers 7, Infants 13	20
„ babies born (includes twins)	351
„ babies still-born	14

There have been 187 ante-natal cases examined during the year. Of these, 153 were admitted. Abortion cases totalled 43, and 14 other cases of complicated pregnancy were not confined. The abnormal deliveries included 17 by forceps and 5 cæsarian section.

The causes of maternal deaths are as under :—

1. General toxæmia due to extensive burns.
2. Pyelonephritis.
3. Anæmia ; puerperal septicæmia.
4. Patient admitted moribund.
5. Incomplete abortion ; hæmorrhage.
6. Incomplete abortion ; cerebral thrombosis.
7. Complete abortion (macerated foetus). Puerperal septicæmia.

SPECIAL DIET DEPARTMENT.

Cases treated by Special Diet during the year	119
Remaining at 1st January, 1936	8
Number of cases admitted	111
„ „ discharged	95
„ „ died	18
„ „ remaining at 31st December, 1936	6

The disabilities treated included the following :—

Diabetes	33 per cent. of cases.
Stomach disorders	44 „ „
Kidney disorders	9 „ „
Blood diseases	2 „ „
Obesity	8 „ „
Gall-bladder disease	2 „ „
Disseminated sclerosis	2 „ „

Of the patients treated by special diet, 8 per cent. were cured, 59 per cent. improved, and in 18 per cent. of the cases the condition remained stationary ; 15 per cent. died.

MEDICAL WARDS.

CLASSIFICATION OF CASES TREATED ON ADMISSION.

1. Infectious and parasitic diseases	3
2. Cancer and other tumours	22
3. Rheumatism, diseases of nutrition and other general diseases	95
4. Diseases of the blood and blood-forming organs	17
5. Diseases of nervous system and sense organs	93
6. Diseases of circulatory system	141
7. Diseases of respiratory system	164
8. Diseases of digestive system	117
9. Non-venereal diseases of genito-urinary system	61
10. Diseases of skin and cellular tissue	1
11. Diseases of bones and organs of locomotion	37
12. Congenital malformations . . . . .	...
13. Senility	7
14. Endocrine disorders	51
	<hr/>
	809
	<hr/>

CHILDREN'S WARDS.

CLASSIFICATION OF CASES TREATED ON ADMISSION.

1. Infectious diseases (convalescent)	73
2. Premature babies	8
3. Rheumatism, diseases of nutrition and other general diseases	8
4. Diseases of the blood and blood-forming organs	3
5. Diseases of the nervous system and sense organs	13
6. Diseases of circulatory system	5
7. Diseases of respiratory system	96
8. Diseases of digestive system	11
9. Non-venereal diseases of genito-urinary system	15
10. Diseases of skin and cellular tissue	220
11. Diseases of bones and organs of locomotion	2
12. Congenital malformations	2
13. Mental deficiency	4
14. Convenience cases (healthy)	137
15. Tonsillectomy cases	89
16. Surgical cases	21
	<hr/>
	707
	<hr/>

Note.—In addition, 93 children were treated by operation in the surgical wards.

MASSAGE AND ELECTRO-THERAPY DEPARTMENT.

The total number of patients treated during the year was 359, of which 299 were cured and improved ; 40 were not improved, and 19 were still under treatment at the end of the year ; 1 patient died. During the year, 4,142 treatments were given, as follows :—

Massage	1,684	Ionisation	11
Galvanism and Faradism	416	Ultra Violet Artificial Sun-	
Diathermy	347	light	224
Infra-red and Radiant Heat	293	Re-education Exercises	1,167

NORTHERN GENERAL HOSPITAL.

No structural alterations have been carried out during the year.

STATISTICS FOR THE YEAR 1ST JANUARY TO 31ST DECEMBER, 1936.

	Remaining 1st January.	Admitted.	Discharged.	Died.	Remaining 31st December.
Adults	241	542	372	179	232
Children	4	96	78	...	22
Totals	245	638	450	179	254

Number of cases treated 883.

TABLE TO SHOW THE RESULTS OF TREATMENT OR TERMINATION OF ILLNESS.

Cured	95	Not Improved	185
Improved	170	Died	179
Remaining under treatment			254.

Causes of death were in the following order of numerical incidence :—(1) Senility, (2) cancer and other tumours, (3) diseases of the respiratory system, (4) diseases of brain and nerves, (5) diseases of the circulatory system, and all other diseases.

Total Beds	280
Average number of occupied beds	242
Average length of stay, in days, per patient	141
Highest daily number of patients	271 on 14.5.36
Lowest daily number of patients	200 on 4.10.36

Dental treatment was given to 6 patients and 25 minor operations were performed during treatment.

CLASSIFICATION OF CASES TREATED ON ADMISSION.

1. Infectious and Parasitic Diseases	105
2. Cancer and other Tumours	50
3. Rheumatism, Diseases of Nutrition and Other General Diseases	86
4. Diseases of the Blood and Blood-forming Organs	6
5. Chronic Poisoning	3
6. Diseases of Nervous System and Sense Organs	68
7. Diseases of Circulatory System	56
8. Diseases of Respiratory System	130
9. Diseases of Digestive System	15
10. Non-Venereal Diseases of Genito-Urinary System	20
11. Diseases of Pregnancy and Childbirth	1
12. Diseases of Skin and Cellular Tissue	27
13. Diseases of Bones and Organs of Locomotion	10
14. Congenital Malformations	1
15. Diseases of Early Infancy . . . . .	...
16. Senility	10
17. Violence	50
	<u>638</u>

EASTERN GENERAL HOSPITAL.

Structural Alterations : A new mortuary and post-mortem room completed.

STATISTICS FOR THE YEAR 1ST JANUARY TO 31ST DECEMBER, 1936.

	Remaining 1st January.	Admitted.	Discharged.	Died.	Remaining 31st December.
Adults { Males	209	1,292	1,022	286	193
{ Females	182	948	756	237	137
Totals	391	2,240	1,778	523	330

Number of Cases treated 2,631

TABLE TO SHOW THE RESULTS OF TREATMENT OR TERMINATION OF ILLNESS.

Cured	263	Not Improved	343
Improved	1,172	Died	523
Remaining Under Treatment	330		

CAUSES OF DEATH.

	<i>Males.</i>	<i>Females.</i>
1. Infectious and Parasitic Diseases . . .	11	10
2. Cancer and Other Tumours . . .	39	21
3. Rheumatism, Diseases of Nutrition and other General Diseases . . .	6	8
4. Diseases of the Blood and Blood-forming Organs . . . . .	...	2
5. Chronic Poisoning . . . . .	...	...
6. Diseases of Nervous System and Sense Organs	74	63
7. Diseases of Circulatory System . . .	47	50
8. Diseases of Respiratory System . . .	50	35
9. Diseases of Digestive System . . .	8	3
10. Non-Venereal Diseases of Genito-Urinary System	7	2
11. Diseases of Pregnancy and Childbirth . .	...	...
12. Diseases of Skin and Cellular Tissue . .	6	3
13. Diseases of Bones and Organs of Locomotion	3	2
14. Congenital Malformations . . . . .	...	...
15. Diseases of Early Infancy . . . . .	...	...
16. Senility	28	35
17. Deaths from Violence	6	2
	<hr/> 285	<hr/> 236
Death Certificates issued by Doctors of the deceased	1	1
	<hr/> 286	<hr/> 237

Number of Post-Mortem examinations 39

Total Beds 375
Average number of occupied beds . . . 345
Average length of stay, in days, per patient 55
Highest daily number of patients . . . 396 on 4.1.36
Lowest „ „ „ . . . 295 on 9.11.36

CLASSIFICATION OF CASES TREATED ON ADMISSION.

	<i>Males.</i>	<i>Females.</i>
1. Infectious and Parasitic Diseases . . .	55	36
2. Cancer and other Tumours . . .	62	65
3. Rheumatism, Diseases of Nutrition and other General Diseases . . .	102	110
4. Diseases of the Blood and Blood-forming Organs	8	11
5. Chronic Poisoning	7	5
6. Diseases of Nervous System and Sense Organs	292	216
7. Diseases of Circulatory System . . .	177	107
8. Diseases of Respiratory System . . .	221	115
9. Diseases of Digestive System . . .	77	47
10. Non-Venereal Diseases of Genito-Urinary System	33	31
11. Diseases of Pregnancy and Childbirth . . .	...	3
12. Diseases of Skin and Cellular Tissue . .	141	89
13. Diseases of Bones and Organs of Locomotion	41	26
14. Congenital Malformations	3	3
15. Diseases of Early Infancy . . . . .	...	...
16. Senility	38	53
17. Violence	35	31
	<u>1,292</u>	<u>948</u>

These patients were medical or chronic surgical cases. In the course of treatment, 40 minor operations were performed and 50 dental treatments were given. There were 22 eye cases, and 17 ear, nose and throat cases during the year.

MASSAGE DEPARTMENT.

The total number of patients treated during the year was 307, of which 28 were cured, 202 improved, and 57 not improved. During the year 5 patients died, and 15 patients remained under treatment at the end of the year. During the year, 2,861 treatments were given, as follows :—

Massage	1,554	Ultra-Violet Artificial	
Galvanism	44	Sunlight	134
Faradism	59	Exercises	775
Ionization	79	Radiant Heat	216

CRAIGLOCKHART INSTITUTION.

SICK WARDS.

STATISTICS FOR THE YEAR 1ST JANUARY TO 31ST DECEMBER, 1936.

	Remaining 1st January.	Admitted.	Discharged.	Died.	Remaining 31st December.
Males	3	256	254	1	4
Females	4	143	135	2	10
Totals	7	399	389	3	14

Of the patients discharged, 180 males and 103 females went back to the Main House part of the Institution.

Total number of cases treated in wards 406.

OUT-PATIENT DEPARTMENT.

Males	4,794
Females	1,556
Total	<u>6,350</u>

CHIEF DISABILITIES.

Sore feet (corns and bunions).
Dyspepsia.
Conjunctivitis.
Otorrhœa.
Septic Fingers.

During the year, 130 patients were supplied with spectacles.

A medical examination of all infirm inmates in the Institution was made every quarter, and an examination of other inmates was made monthly.

There were 19 ante-natal cases in the Institution during the year.

There were no epidemics amongst the inmates during the year.

CRAIGLEITH CHILDREN'S HOME.

During the year from 1st January to 31st December, 1936, on an average 84 children were resident in the Children's Home.

The greatest number of children in the Home at one time was 103 on 12th February, 1936, and the lowest number was 62 on 9th September, 1936. The number of toddlers was about 30 to 40 per cent. of the total number of children admitted to the Home during the year.

Sixty-three children were sent to country board—8 less than the figure for the previous year.

Apart from mild epidemics of chicken-pox and whooping-cough, and a few cases of measles and mumps, the health of the children was good.

PATHOLOGICAL SERVICES.

The service has been in action since 1st February, 1936.

Between that date and 31st January, 1937, 131 autopsies have been carried out, and 68 examinations made of biopsy specimens. The material obtained by autopsy and biopsy at the various hospitals has been histologically examined at the Department of Pathology of the University, and the histological slides have been filed.

Detailed reports of autopsy and biopsy findings have been made in duplicate, one copy being sent to the clinician concerned, and the other being filed by the Pathological service.

An index to the cases is being made, so that reports and histological preparations will be readily available for review at any time.

The autopsies from 1st February to 16th September, 1936, were carried out by :—

	<i>No. of Autopsies.</i>
Professor A. Murray Drennan	42
Dr. W. G. Millar	15
Dr. R. F. Ogilvie	26
Dr. Melville Arnott	6
Dr. R. Murray Lyon	1

Since that date they have been carried out by Dr. A. C. P. Campbell, with the direction and advice of Professor Drennan.

The work has been distributed among the various hospitals as follows :—

	<i>Autopsies.</i>	<i>Biopsies.</i>
The Western General Hospital	87	62
The Eastern General Hospital	29	5
The Northern General Hospital	15	1
Totals	<u>131</u>	<u>68</u>

CLASSIFICATION OF CASES AUTOPSIED.

(Where more than one pathological process has been present, the case has, for the purpose of this report, been inserted only under the heading of the process regarded as the primary cause of death.)

TUBERCULOSIS.

Pulmonary	3
Other forms	4
	<u>7</u>

SYPHILIS.

Laryngitis	1
	<hr/>
	1
	<hr/>

CARCINOMA.

Colon	4
Bronchus	3
Pancreas	2
Uterus	2
Oesophagus	2
Breast	1
Ovary	1
Gall Bladder	1
Thyroid	1
Tongue	1
Kidney	1
Larynx	1
	<hr/>
	20
	<hr/>

SARCOMA.

Lung	1
Oesophagus	1
	<hr/>
	2
	<hr/>

RESPIRATORY SYSTEM.

Lobar pneumonia	4
Broncho pneumonia	5
Bronchitis	2
Bronchiectasis	2
	<hr/>
	13
	<hr/>

ALIMENTARY SYSTEM.

Cirrhosis of Liver	4
Perforated Peptic Ulcer	3
Congenital Dilatation of Oesophagus	1
Oesophageal Achalasia	1
Intussusception	1
Intestinal obstruction of obscure origin	2
Acute Cholecystitis	1
Enteritis	2
Sprue	1
	<hr/>
	16
	<hr/>

CARDIO-VASCULAR SYSTEM.

Arteriosclerosis and Hypertension	5
„ with Cerebral Hæmorrhage	4
„ with Cerebral Thrombosis	1
Myocardial Infarction and Fibrosis	3
Pulmonary Thrombosis	1
Pulmonary Embolism (2 post. traumatic)	3
Thrombosis of Inf. Vena Cava	1
Atheroma and Rupture of Aorta	1
Rupture of Cerebral Aneurysm	1
Chronic Endocarditis	5
Subacute Bacterial Endocarditis	2
Congenital Cardiac Anomalies	3
	<hr/>
	30
	<hr/>

URINARY SYSTEM.

Chronic Glomerulonephritis	5
Arteriosclerotic Nephrosclerosis	1
Congenital Cystic Disease of Kidneys	1
Septic Infections of Urinary Tract	5
	<hr/>
	12
	<hr/>

REPRODUCTIVE SYSTEM.

Abortion	2
Puerperal Endometritis	1
Acute Salpingitis and Peritonitis	1
	<hr/>
	4
	<hr/>

NERVOUS SYSTEM.

Epilepsy	1
Hydrocephalus	3
Amyotrophic Lateral Sclerosis	1
Progressive Muscular Atrophy	1
Staphylococcal Meningitis	1
	<hr/>
	7
	<hr/>

HAEMOPOIETIC SYSTEM.

Lymphadenoma	1
Acute Leukæmia	1
Anæmia of obscure origin	1
	<hr/>
	3
	<hr/>

Pre- and early post-natal Death without obvious lesion . 4

VARIOUS.

Cellulitis, Pyæmia, Septicæmia	5
Pemphigus	2
Alcohol poisoning	2
Lysol poisoning	1
Burns	1
Addison's Disease	1
	<hr/>
	12
	<hr/>

In addition, 3 autopsies (cases of pulmonary tuberculosis, agranulocytosis and acute anterior poliomyelitis) and 1 biopsy were carried out by the Service at the request of the clinical staff of the City Hospital, Colinton.

MENTAL HEALTH SERVICES.

BANGOUR MENTAL HOSPITAL.

REPORT BY MEDICAL SUPERINTENDENT.

The following table shows the main changes in the population of Bangour Hospital during the year 1936 :—

	M.	F.	Total.
Number on Register at 1st January	500	545	1,045
Admitted during the year	129	131	260
Total number under care	629	676	1,305
	M.	F.	Total.
Discharges	83	82	165
Deaths	41	40	81
	M.	F.	Total.
Remaining on Register at 31st December	505	554	1,059
Average daily number on Register, 1,052			

Of the total 260 admissions, 73 were voluntary admissions. This proportion is still far short of what it might be, though it has risen steadily during the last few years. One factor which helps to maintain the relative predominance of the certified admissions is the increasing number of senile patients admitted to the hospital. Almost without exception these are certified before admission. While these deserving folk are better understood and more patiently nursed in our mental hospitals than elsewhere, it is regrettable that care is denied them unless they are first placed under certificates of insanity. In many instances it seems a deplorable climax to a lifetime of honest toil. If and when the archaic laws under which all mental hospitals operate are amended it is to be hoped that certification in such cases will be abolished altogether. In other branches of hospital work, reliance is placed on the good faith of the medical profession and there seems no reasonable ground for withholding the same discretion in the case of the mental hospital.

Of the total of 1,059 on the Register at 31st December, 6 were absent on probation. Owing to circumstances over which the hospital has no control, this figure is again unsatisfactory. When a patient is placed on probation, he is allowed to live at home or with friends to all intents and purposes as if he had been discharged. The difference is that his certificates remain in force and the patient may be brought back to the hospital within 12 months should the need for further care arise. In theory this is an excellent method of "trying out" a patient, but in actual practice it is hedged about by many difficulties. Some have no friends to take an interest in them; in many cases the home environment is found to be unsuitable. It is difficult to see how this difficulty can be surmounted until there is an appreciable rise in the standard of housing accommodation available for the general public.

One pleasing feature of the probationary system has been the readiness of a few employers to re-engage former employees while still on probation. Nothing goes farther to restore a patient's self-esteem and confidence than to take his former place in industry and find that he is still of some use in the world.

The admissions call for no special comment, except that 75 per cent. of the patients admitted were classified as in poor or exhausted physical states. Evidences of severe malnutrition were apparent in many instances, even when the patients came from comfortable homes. Much of this is due not to a lack of good food, but to self-imposed starvation, either partial or complete, and occurs most commonly in patients who suspect food-poisoning or who refuse food by way of penance for their sins. With proper nursing care and due attention to diet most of them rapidly increase in weight and their mental outlook improves correspondingly.

Unlike physical ailments, it is rarely possible in mental maladies to attribute the onset to a definite, specific cause. In practically all cases the responsible factors are many and complicated. Although the following table sets forth the main ascertained causes, that consideration has to be kept in mind in interpreting it :—

CAUSATIVE FACTORS.

Group.	Total
Heredity	38
Previous Attacks	68
Adolescence	52
Climacteric	30
Pregnancy, Parturition, Puerperal, and Lactation	5
Cerebral Disease	41
Specific Diseases	15
Epilepsy	5
Encephalitis Lethargica	2
Other Bodily Diseases	17
Alcohol	16
Worry, Anxiety, Adverse Circumstances	37
Unemployment	4
Love Affair	2
Congenital	7
Unknown	17

An analysis of the admissions shows that they can be grouped according to the type of mental illness as follows :—

A. Maniac-Depressive Insanity	89
B. Schizophrenic and Allied States	75
C. Insanity due to Organic Disease	77
D. Psychoneuroses, etc.	19

Of these only Group A, characterised by profound emotional disturbances, either maniacal or depressed, offer a tolerably certain hope of complete recovery. In the remaining groups the outcome of the attack depends on such factors as the individual's constitution and the duration of the illness before it is treated.

During the year the health of the patients has been good. Fortunately there was complete immunity from epidemic diseases. It is noteworthy, too, that no serious accident occurred to any patient.

CAUSES OF DEATHS DURING THE YEAR 1936.

Causes of Death.	Men.			Women.			Totals.
	Cert.	Vol.	Total.	Cert.	Vol.	Total.	
<i>General Diseases :—</i>							
Tuberculosis of Lungs . . .	3	...	3	2	...	2	5
" Peritoneum . . .	...	...	...	1	...	1	1
" Bone and Joints . . .	...	...	...	1	...	1	1
Influenza with Acute Broncho-pneumonia . . .	...	...	...	1	...	1	1
Carcinoma of Breast . . .	...	...	...	1	...	1	1
" Uterus . . .	...	...	...	1	...	1	1
" Pancreas . . .	...	...	...	1	...	1	1
Septicæmia following Cellulitis . . .	...	...	...	3	...	3	3
<i>Diseases of the Nervous System :—</i>							
General Paralysis . . .	8	...	8	1	...	1	9
Tabes Dorsalis . . .	...	...	...	1	...	1	1
Cerebral Hæmorrhage . . .	1	...	1	3	...	3	4
" Thrombosis . . .	4	...	4	8	...	8	12
Epilepsy . . .	4	...	4	...	...	...	4
Exhaustion from Acute Mental Disease . . .	...	...	...	4	1	5	5
<i>Diseases of the Cardio-Vascular System :—</i>							
Chronic Myocardial Degeneration . . .	10	1	11	4	...	4	15
Acute Cardiac Dilatation . . .	2	...	2	...	...	...	2
Arterio-sclerosis . . .	5	3	8	3	...	3	11
<i>Diseases of the Respiratory System :—</i>							
Pneumonia . . .	...	...	...	2	...	2	2
Broncho-pneumonia . . .	...	...	...	1	...	1	1
<i>Diseases of the Genito-Urinary System :—</i>							
Chronic Nephritis . . .	...	...	...	1	...	1	1
TOTALS . . .	37	4	41	38	2	40	81

In the summer an interesting piece of research work was undertaken to determine the connection, if any, between blood-relationship in the parents and the onset of mental illness in the patients. There is no subject on which the uninitiated are so prone to dogmatise as that of heredity in relation to mental disease. In this limited aspect of the matter an attempt is being made to elucidate the real facts. The investigation was prompted by the Medical Research Council, Bangour being taken as a representative urban hospital. The statistical side of the enquiry is being worked out by Dr. T. A. Munro, who holds a research scholarship from the Council. Reports on the incidence of con-sanguinity have been received from most of the Scottish Mental Hospitals and Defective Institutions and are being incorporated in the study.

Hospital Improvements.

New lavatory accommodation mainly for night use has been installed wherever necessary, and also separate bathrooms for those members of the staff who reside in the detached villas. At present much of the old lavatory accommodation is being overhauled and brought up to date. All the villas have now been placed on a regular routine for re-decoration and in future it should be easier to keep them fresh and attractive. Through the kindness of numerous well-wishers, most of the wards have been equipped with wireless sets, which are much appreciated.

The last of the temporary buildings to be reconstructed is now in use and as a result a villa used as a relief building during the last few years and capable of taking 55 patients has become available for female patients. It is proposed to utilise this accommodation by reducing the numbers in those wards where the patients require as much elbow-room as possible.

It has been found possible to effect several improvements in the dietary, both of patients and of staff, without additional cost. In this connection mention should be made of the willingness and resourcefulness of the Kitchen Superintendent and her staff, who by their efforts have done much to relieve the monotony in diet which is apt to be the bane of hospital life.

It is hoped that before long similar improvements may be effected in the dress of the patients, especially the women. "The apparel oft proclaims the man," and still oftener the woman. To deny her this outlet for self-expression in these days of cheap production is a hardship which many of them find most irksome.

Staff.

There has been difficulty, now and again, in obtaining a suitable supply of probationers, a difficulty which confronts every hospital. Although, as compared with former days, discipline has been relaxed and wages have increased, the shortage still proves troublesome. Recently it has come to light that in some cases the real bogey is the examination system. There is no doubt that the efforts of the General Nursing Council to raise the professional status of the nurse has had quite unlooked-for results, and it looks as if the pace was being made too hot for some at least. The probationer must, it is agreed, undergo the prescribed course of training, but whether she should present herself for the qualifying examination might be left to her own decision. After all, it is the training, conscientiously undertaken, that counts rather than the parchment. At the same time, it must be remembered that the higher appointments are open only to those holding certificates, and that experienced uncertificated nurses are apt to become dissatisfied with their lot when their certificated juniors overtake them. The difficulty would be lessened if the disparity between the salaries of certificated and uncertificated nurses were reduced, provided always that both had undergone the same course of training. No doubt the criticism may be made that such a step means reducing the status of the profession by tolerating a considerable number of untrained persons. But the main desideratum is to get and keep a staff.

Of late years the number of certificated mental nurses proceeding to general training has tended to rise. From every point of view this is a welcome development. At the same time, what the general hospital gains means a temporary loss to the mental hospital, for it is invariably the most progressive and proficient mental nurses who take up general training. Later, however, they return to mental work for service in official posts, equipped with a training which has a better title to be regarded as "general" than anything acquired in the limited spheres of medicine and surgery.

In the mental hospital the question of staffing is bound up with the employment of the patients. Every effort is made to interest patients in some sort of useful employment, not primarily because it reduces expense, but because it is found to be a most potent stimulus to the patient. As the time passes, however, it is becoming more and more difficult to find the proper niche for the patient. The conditions of living have so altered that, for example, the old domestic arts such as knitting, sewing, laundering and to some extent cookery, seem to have fallen from their former place. Consequently a larger share of the domestic work has to be done by the staff, and the risk arises of over-stressing that side of the nurse's duties. To obviate this the experiment has been tried of replacing a small part of the nursing staff by domestic helps. The experiment has been an unqualified success, and consideration should be given to its extension. The strictly professional work of the nurse is arduous enough without the addition of a large amount of purely domestic work. Wherever possible, the nursing staff should be relieved of it.

The conditions under which the staff work have been greatly improved since the Corporation became responsible for the administration of the hospital. There remains to be adjusted the matter of hours of duty which are at present considered too long. This subject is now being studied with a view to conforming to the reduction planned by the mental hospitals generally.

The National Health Services Report.

This is by far the most important move in connection with mental hygiene that has occurred in Scotland for many years. It should be remembered that the law controlling the mental health services dates from 1857, and that since then only minor amendments have been introduced. That fact suffices to expose the inadequacy of the law to meet modern conditions.

Not only has the law remained stereotyped, but also the *modus operandi* of the General Board of Control, itself hampered by legal restrictions. Created 80 years ago the main business of the Board was to suppress the abuses which characterised the haphazard and often heartless methods of dealing with the insane of that day. But in the conditions which exist now when our hospitals are under public or disinterested control and are inspired by the same ideals as the General Hospitals, the intervention of the Board has largely become a work of supererogation. In short, the Board perpetuates a system which is wholly out of touch with the realities of the present time.

It is essential, as the Report states, that Scotland should have "a unified national health policy covering the whole field of morbidity and embracing mental health as an integral part." The arguments for such a unified policy are unanswerable. Mental medicine cannot nowadays be regarded as a separate entity detached from the main body of general medicine. Isolation means inefficiency, while national welfare requires the closest co-operation with other branches of medicine. The retention of a separate central authority for mental as distinct from physical health must tend to obstruct the realisation of the ideal, unified health policy.

The present patch-work of authorities (for no fewer than three Departments are concerned) should give way to a Department of Mental Health in its widest sense. This new Department ought to be complementary to and conjoined with the existing Department of Health. Such an arrangement would provide what is most urgently required, namely :—

- (1) The closest possible liaison between the agencies dealing with different aspects of the general health problem.
- (2) The complete supervision of the work of mental hygiene both within and without the mental hospitals without regard to wholly artificial distinctions and classifications.

It is earnestly to be hoped that these and the other proposals formulated in the Report will be followed by legislative action. A new orientation of the law is long overdue.

While among those best qualified to judge, the time is ripe for radical reform, there are not wanting indications that many of the old fears and prejudices may again be enlisted to obstruct any change emphasising the medical as contrasted with the legalistic conception of mental hygiene. In this connection the "liberty of the subject" has done yeoman service in the past and will almost certainly be relied on again. Yet it is a remarkable fact that there has never been in Scotland a successful action for damages for illegal detention. Moreover, the bogey of a threatened action only appears at the rarest intervals. In something like twenty years experience, only one threatened action can be recalled.

The explanation of this immunity lies to some extent in the fact that in Scotland all the mental hospitals (with one exception) are managed either by public or by equally disinterested bodies and that no one can conceivably gain any advantage from the compulsory detention of a patient longer than is necessary for his own safety or that of others. Indeed, if the hospital authorities are exposed to any temptation, it is of the opposite character, for the demands on their accommodation severely tax their resources. If legal safeguards are considered necessary, it would be no hardship to place these in the hands of the Sheriff as the Health Services Committee suggests. That done, the fusion of mental with general health administration would be greatly facilitated.

The Report opens up great prospects of a real and long awaited advance in the field of mental hygiene, and the whole community owes a debt to those who framed it.

Acknowledgments.—A word of gratitude is due to the whole staff of the Hospital for their good work during the year, and especially to the nursing staff whose duties, often arduous and sometimes intensely difficult, have been so admirably performed.

GOGARBURN CERTIFIED INSTITUTION

(For Mental Defectives.)

REPORT BY MEDICAL SUPERINTENDENT.

General Statistics.—The following are the general statistics. The increase recorded in the patient population during the year was due to the fact that in March the Children's Blocks which had been in course of construction were completed and became available for occupation. As a result we were able for the first time to effect a fairly complete segregation of the children of both sexes from the adult population of the Institution. As a consequence of the withdrawal of the children, a number of vacancies were created in the adult sections. The vacancies on the male side were very quickly filled, and at the end of the year we found ourselves faced with a shortage of accommodation for male patients.

	Male.	Female.	Total.
Patients on Register at 1st January, 1936	246	160	406
Cases admitted during the year	23	55	78
Total number under treatment	269	215	484
Cases discharged during the year	7	4	11
Cases transferred to other institutions . . . . .	...	1	1
Cases died during the year	5	8	13
Patients on Register at 31st December, 1936	257	202	459

The figures represent an increase of 11 male patients and 42 female patients, being a total increase of 53 in the patient population for the year.

The average daily number of patients on the register during the year was 450.

Medical Statistics.—Seventy-eight patients were admitted to the Institution during the year. Of that number 23 were males and 55 were females. Of the 78 admissions, 9 males and 22 females were children under 16 years of age.

The place of origin of the patients admitted was as follows :—

	Male.	Female.	Total.
Admitted direct from their Homes	14	25	39
„ from Western General Hospital	1	3	4
„ „ Eastern General Hospital . . . . .	...	5	5
„ „ Northern General Hospital . . . . .	...	2	2
„ „ Craiglockhart Institution . . . . .	...	8	8
„ „ Bangour Mental Hospital . . . . .	...	1	1
„ „ Edinburgh Prison	4	...	4
„ „ Children's Home, Crewe Road . . . . .	...	4	4
„ „ Baldovan Certified Institution . . . . .	...	1	1
„ „ St. Joseph's Certified Institution . . . . .	...	1	1
„ „ Waverley Park Cert. Institution . . . . .	...	1	1
„ „ Rossie Farm Approved School	1	...	1
„ „ Royal Infirmary . . . . .	...	1	1
„ „ Dean Terrace . . . . .	...	1	1
Cases recertified and readmitted on attaining the age of 16 years	3	2	5
	23	55	78

Of the admissions, therefore, 50 per cent. were admitted direct from their homes as compared with 37 per cent. in 1935, 15 per cent. were admitted from the Royal Infirmary and the Municipal General Hospitals, as compared with 9 per cent., 10 per cent. were admitted from Craiglockhart Institution, 8 per cent. were admitted from Prisons and similar Institutions, 5 per cent. were admitted from the Children's Home, and 3 per cent. were admitted from other Certified Institutions. The admission from Bangour Mental Hospital constituted 1 per cent. of the total number of admissions as compared with 33 per cent. in 1935.

The general physical condition of the patients admitted was as follows :—

	Male.	Female.	Total.
In fair or average health and condition .	10	16	26
In poor or indifferent health and condition .	11	26	37
In weak or very weak health and condition .	2	13	15
	<u>23</u>	<u>55</u>	<u>78</u>

Thus, in 67 per cent. of the cases admitted, the general standard of physical health was considerably below the normal. It cannot be too clearly understood that mental defectives as a class, no matter whether the defect is induced by disease or injury or is due to inherent causes, are persons of lower vitality than their normal fellows. Not only so ; in the more severe grades, such as idiots and the imbeciles, the mental defect is often accompanied by complicating factors in the nature of epilepsy and various forms of paralysis. Even in the feeble-minded grade, it is comparatively rare to find the patients in robust physical health on admission. It is not surprising, therefore, to find that the general standard of health and the degree of resistance to infection is not of a high order. The general physical inferiority of the mental defective is in many cases apt to sustain the opinion, still widely held in many quarters, that mental defect is due to a gross physical abnormality in the brain itself—a “ kink ” which can be removed by medical measures or surgical intervention. After all, it is barely thirty years ago since surgeons of the first rank, such as Horsley and Kocher, were performing the operation of craniotomy on microphalics in the vain hope of allowing the brain to expand and thus improve the mentality of the defective. It is still a not infrequent experience to be approached by parents and others interested in mental defectives who believe that a surgical operation on the brain would restore them to intellectual normality and are anxious that such measures should be undertaken.

In actual fact it is extremely rare to find permanent mental retardation resulting from remediable physical causes. On the other hand the importance of the fact that mental deficiency is very frequently accompanied by some form of physical subnormality cannot be too clearly recognised.

Classification.—The following table shows the mental grade and age grouping of the patients admitted.

Classification	1-5		6-10		11-15		16-20		21-25		26-30		31-35		36-40		41-45		46-50		Over 50		Totals	
	M	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Idiot	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2
Imbecile	2	1	3	1	3	3	7	...	2	1	2	...	...	...	6	...	1	...	...	...	2	6	26
Feeble-minded	2	1	1	5	9	6	9	3	2	...	...	...	...	1	...	...	1	...	...	1	16	25	
Total Males		3		6		9		3		1		...		...		...		1		...		23	
Total Females .		5		5		12		16		4		2	...		7		1		...		3		55	

It will thus be seen that of the admissions 4 per cent. were idiots, 44 per cent. imbeciles, and 52 per cent. of the feeble-minded grade of mental defect.

Causation.—So far as could be ascertained the causes of the incompletion of mental development were as follows :—

Primary Amentia. (Inherited and Transmissible).

	Male.	Female.	Total.
Simple	18	33	51
Mongolism	1	...	1
	19	33	52

Secondary Amentia.

(Arrest of cerebral development due to environmental factors.)

	Male.	Female.	Total.
Traumatic . . . . .	...	2	2
Inflammatory	1	7	8
Hydrocephalic	1	1	2
Syphilitic . . . . .	...	1	1
Epileptic	2	11	13
	4	22	26

Thus in 65 per cent. of the cases admitted the chief causative factor was heredity. This conclusion, however, is commonly mis-stated or misunderstood. It is usually supposed that the designation of inheritance as a causal factor implies that the mental defective is descended from mentally defective parents. This is undoubtedly wrong. What is actually found is that only in a small proportion of cases, probably not more than 5 per cent., is one or other parent definitely mentally defective. In a considerably larger proportion of cases the parents are mentally dull, but above the borderline of actual mental defect. In others the parents exhibit no evidence of intellectual inferiority, but there is a definite family history of mental instability manifested in the form of temperamental peculiarities, epilepsy, or insanity. Even in families where there is no evidence of intellectual weakness a sporadic case of primary amentia is by no means unusual. In these cases the degree of defect is usually severe, tending

towards idiocy or imbecility rather than to feeble-mindedness, and are often of a definite clinical type. In such cases, however, though there may be no family history of intellectual weakness, neurotic traits or emotional instability are frequently present in the parents or relatives. It is an interesting fact that in the lowest grades of mental deficiency, hereditary factors appear less frequently than they do in the milder degrees of feeble-mindedness.

With regard to the incidence of mental defect in the general population, it is my opinion that with a falling birth rate, and a falling infantile death-rate, the inevitable tendency will be for the proportion of mental defectives in the community to increase. As this fact becomes more apparent the orientation of our Public Health Services will become more definitely directed towards the promotion of measures designed to secure the welfare of the race than is the case at present. In a recently published report of the condition of general intelligence of two representative areas, it has been shown by statistical means that the intellectual level varies in inverse ratio to the birth-rate in all classes of society. That conclusion, based on carefully observed and co-ordinated facts, would indicate, if present population tendencies continue, there must be a progressive increase in the number of mentally deficient in the population. The facts brought to light in this report have resulted in an insistent demand for the setting up of a Royal Commission to examine proposals which might be made effective in the near future, in order to safeguard the quality of our population and secure its racial betterment.

Discharges.—Twelve patients were discharged from the Institution during the year. It must be pointed out, however, that 5 of these were in the case of children who, on attaining the age of 16 years, had to be re-certified in accordance with the provisions of the Mental Deficiency and Lunacy (Scotland) Act, 1913. They were technically discharged and re-admitted without leaving the Institution.

The method of disposal of the patients discharged is shown in the accompanying table.

	Male.	Female.	Total.
Discharged to their Homes	4	2	6
Transferred to the State Institution for Criminal Defectives . . . . .	...	1	1
Discharged on attaining the age of 16 years	3	2	5
	<u>7</u>	<u>5</u>	<u>12</u>

Deaths.—The deaths during the year numbered 13, as compared with 5 in the previous year. The principal causes of death were as follows :—

Diseases of the Central Nervous System	5
„ „ Circulatory System	2
„ „ Respiratory System	1
„ „ Alimentary System	1
Other causes	4

The average age at death was 37 years.

Calculated on the average number of patients resident during the year, the percentage of deaths was 2.9.

General Health.—The general health of both patients and staff during the year has, on the whole, been satisfactory.

In November and December the prevailing influenza epidemic was responsible for many cases of sickness. Fortunately, the illness in the majority of cases was of a mild type, and even those cases with severe respiratory and other complications eventually made a complete recovery. No deaths were recorded from this cause. Apart from influenza there was a gratifying absence of infectious illness.

It is thankfully recorded that no serious accidents affecting either patients or staff occurred during the year.

Development of the Institution.—As stated earlier in this report two Children's Blocks, both single-storied buildings accommodating 50 patients, were completed and occupied during the year.

In the course of the year the existing facilities for occupational training were extended in several directions. The poultry farm which was started last year was further extended. Continuing the policy of rearing stock from the stage of day-old chicks, the number of laying birds was increased to 250. By the end of the year the poultry farm was producing on average, 4,500 first grade eggs per month. In addition 45 cockerels were fattened, killed and used for table purposes. The average weight per bird, dressed and ready for cooking, was 6 lbs.

The work of making mats from worn motor tyres, and also the making of coir mats, has been actively and successfully continued throughout the year. We were successful in obtaining the contract for the supply of these articles to other Departments of the Corporation. As a result we have been able to carry out this branch of training at a small profit.

During the latter part of last year, a basket-maker was engaged on a part time basis. In view of the encouraging results obtained, this occupation was placed on a whole time basis during the present year. Not only was a wide variety of useful articles, such as laundry hampers, baskets of all kinds, cane chairs and stools manufactured, but what is equally important, those articles which were not required for use within the Institution were readily and profitably sold. Not only was a wide range of articles manufactured in the basket-making shop, but a large proportion of the cane used in their manufacture was grown and prepared for use in the Institution.

The Staff.—Several changes occurred in the staff during the year. Dr. Ruby Slater, who filled the post of Assistant Medical Officer for a period of two years, resigned on receiving a Public Health appointment with Portsmouth Town Council. She was succeeded by Dr. Frederick Fiddes. Sister Mason, who filled the post of Assistant Matron for a period of three years, was successful in obtaining the post of Matron at Caistor Certified Institution, Norfolk, and resigned to take up this post. She was succeeded by Miss Murphy. In view of the growth of the Institution, it was found necessary to appoint an extra Assistant Matron. Miss Dow was appointed to this post.

Teaching and Research.—During the year the training of nurses and the teaching of medical students and post-graduates have been actively continued. The association of the Institution and the University is particularly useful in the opportunities it offers for the prosecution of research work in the many difficult problems that encompass the condition of mental defect. During the year we have continued, in collaboration with workers attached to the University Medical School, a series of researches with a view to obtaining a method of controlling epileptic seizures, other than by the exhibition of depressant drugs.

In addition we have carried out during the year, in conjunction with the Department of Neuropathology, an attempt to ascertain the degree of correlation existing between cerebral structure and intelligence. It is an interesting fact that in several cases in which we were able to carry out a microscopic examination of the brain, even where clinically such cases had shown a severe degree of mental defect, no structural abnormality of the cerebral cortex was demonstrable. The inference would appear to be that the degree of correlation between the intellectual level and the microscopic appearance of the cortex is extremely low.

Recreative Facilities.—I have again to express my thanks to those various social organisations who so generously continue to bring concert parties to the Institution during the winter months. Their visits are much appreciated. I have also to thank the staff for the time and effort expended by them in the entertainment of the patients.

The Scout Troop for the older boys, and the Cub Pack for the School boys, continue to thrive vigorously. During the year we were successful in obtaining the voluntary services of a trained Guide Captain to continue the work of the Girl Guide Troop. We are still anxious to obtain the services of a voluntary worker to continue to help with the work of the Brownie Pack for the little girls.

We have now three football teams in the Institution—a junior team, composed of the boys attending school, an intermediate team composed of older boys, and a senior team composed of high grade adult patients and attendants. The senior team have had a very successful year. They won the Championship of the second division of the Lothian Amateur League, and thus gained promotion to the first division. They also won the Lothian Amateur Cup, defeating the Gordon Highlanders by two goals to one in the final at New Meadowbank. They are at present undefeated leaders of the first division of the Lothian Amateur League, and have succeeded in winning their way into the final round of the Scottish Amateur Cup.

Acknowledgments.—Throughout the year the work of the staff has maintained the usual high level of efficiency and loyalty. To all I am indebted for their co-operation and help.

SCHOOL MEDICAL SERVICE.

The following is a report on the work of the School Medical Service for the year ending 31st July, 1936.

Number of Schools.

The number of Schools and Special Classes under the Scheme of Medical Inspection is 108 :—

Elementary Schools	70
Central, Intermediate and Secondary Schools	19
Special Schools and Classes	15
Merchant Company Schools	4
	<hr/>
	108
	<hr/>

The average number of pupils on the roll was 63,022, with an average daily attendance of 58,213 :—

	Average Roll.	Average Attendance.
Elementary Schools	38,320	35,303
Intermediate and Secondary Schools	13,009	12,104
Special Schools	1,107	975
Episcopal Schools	725	677
Roman Catholic Schools	5,958	5,509
Merchant Company Schools	3,903	3,645
	<hr/>	<hr/>
	63,022	58,213
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Medical Inspection.

The method of Medical Inspection in Edinburgh consists of (1) routine examination of all new entrants ; (2) routine examination of children in their 13th year ; (3) (a) inspection of other children in their class-rooms, and (b) full examination of doubtful cases "selected" at class-room inspections.

Class-Room Inspections.

There were inspected in class-rooms 27,801 children (boys, 13,988 ; girls, 13,813) of various ages. For these, 5,025 notices (18·1 per cent.) to parents of defects were given at once (boys 1,427, or 28·4 per cent. ; girls 3,598, or 71·6 per cent.).

In addition, 369 (boys 183, girls 186) were selected for further examination ; so far, 54 (boys 26, girls 28) of these have been examined and 12 further notices (22·2 per cent.) were given ; a total of 5,037. Further, 17 (boys 1, girls 16) were placed under medical supervision.

Vision and Hearing in 7-Year-Olds.

Under the present scheme, the first routine testing of vision and hearing is held at age 7 instead of age 9 as formerly was the case. The statistics of these tests are as follows :—

Total numbered examined . . .	5,081 (boys, 2,494 ; girls, 2,587)
No. found defective . . .	925 or 18·2 per cent.
Vision	834 (boys, 48·3 per cent. ; girls, 51·7 per cent.)
Hearing	91 (boys, 42·8 per cent. ; girls, 57·2 per cent.)
No. referred to Medical Officer . .	327
Vision	269 (boys, 47·9 per cent. ; girls, 52·1 per cent.)
Hearing	58 (boys, 39·6 per cent. ; girls, 60·4 per cent.)
No. of Cards issued	525
Vision	489 (boys, 47·2 per cent. ; girls, 52·8 per cent.)
Hearing	36 (boys, 36·1 per cent. ; girls, 63·9 per cent.)

Diphtheria Immunisation.

There was continued, during the year, voluntary immunisation of infant entrants against diphtheria ; 2,264 children were inoculated with one injection of Alum Precipitated Toxoid.

Organisation and Administration.

System of Medical Inspection. The following groups of pupils are examined :—

In Primary Schools—

- (a) Newly enrolled infants.
- (b) Sub-leavers (in 13th year).
- (c) Remainder inspected in class-rooms.

In Intermediate and Secondary Schools—

- (a) Twelve-year-old pupils.
- (b) Sixteen-year-old pupils.

Schools are visited at regular intervals during the session by the same doctor and the same nurse. The larger schools are visited once a fortnight, small schools every three or four weeks.

Number of Visits to Schools for Systematic Examination in accordance with Scheme of Inspection.

The total number of visits paid to schools in connection with routine examinations was 1,409.

At each visit to schools for routine inspection, a certain time is devoted to the examination of any pupils presented by the Head Teacher or sent by Attendance Officers ; these pupils constitute the “special” cases mentioned in the report. In addition, Monday forenoons and Wednesday afternoons are devoted to the examination at Lauriston Place Treatment Centre of cases sent up by the Chief Attendance Officer, and to cases requiring more detailed examination. Similar cases are examined at Links Place Treatment Centre on Wednesday afternoons, and at Niddrie Treatment Centre on Friday afternoons.

All the Special Schools are visited at regular intervals.

Nurses.—The total number of nurses employed on school work is eighteen. Eight assist at school inspection, four are attached to Special Schools, and six to the Treatment Centres.

Duties in Schools.—In addition to assisting at routine inspections, where 1,359 visits were paid to schools, 8,877 special examinations were made in schools by the nurses in connection with neglect cases ; the testing of vision and hearing of 5,049 children was also carried out by the nurses.

Home Visitation.—The nurses paid 2,779 visits to homes.

Arrangements for "Following Up."—In connection with dirty and verminous conditions, 448 notices were issued from schools. These cases are visited by the nurses, usually with satisfactory results, but it was found necessary to serve statutory warning notices on 44 parents.

Insufficient Food, Boots, or Clothing.—Warning notices are sent from schools regarding these conditions, and when application is made by parents for assistance, either for food or clothing, a full inquiry is made into the case by a committee, which decides whether the case is one of poverty and deserving relief, or one of neglect to be dealt with by statutory notice, etc.

Education Committee's Feeding Scheme.—Details regarding this scheme are given later in the report.

Clothing of Necessitous Children.—Requirements as regards clothing and boots for necessitous children continue to be met chiefly by the Police-Aided Clothing Scheme and other charitable agencies. Details are given later in the report.

The following table shows the number of warning notices under section 6 of the 1908 Act served upon parents for the various forms of neglect :—

Form of Neglect.	Number of Notices served.
Insufficient Boots and Clothing . . . . .	...
Dirt and Vermin	44
Neglect of Medical Treatment	14
	58
	<hr/>

Infectious Diseases.—The following table gives the number of children absent during the session owing to various infectious diseases, showing actual cases and contacts. In the table the monthly totals are shown.

Absence Due to Infectious Disease.

	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Totals.	Per cent. of Totals.	Actual Cases.	Contacts.
Scarlet Fever	89	179	215	136	121	116	101	77	136	153	79	1,402	11.9	926	476
Diphtheria	94	124	146	82	62	54	76	33	57	36	14	778	6.6	371	407
Mensles	18	57	242	446	819	700	579	238	185	77	19	3,380	28.6	2,767	613
Whooping Cough	88	44	25	24	14	18	37	30	76	64	45	465	3.9	449	16
Chickenpox	98	256	353	241	266	153	143	117	132	151	103	2,013	17.0	1,708	305
Mumps	14	87	128	132	189	190	217	151	313	239	94	1,754	14.8	1,454	300
Skin Diseases	155	275	248	115	152	136	136	51	173	109	35	1,585	13.4	1,585	...
Ringworm	9	25	17	22	25	26	29	9	23	9	8	202	1.7	202	...
Itch	22	30	36	20	3	27	17	11	17	12	4	199	1.7	199	...
Eye Diseases	2	2	5	5	24	...	6	2	3	2	...	51	0.4	51	...
Totals	589	1,079	1,415	1,223	1,675	1,420	1,341	719	1,115	852	401	11,829	100.0	9,712	2,117

Presence of Parents at Inspection.—The number of parents present at the routine inspection was 6,206 for the 11,551 pupils examined—53·7 per cent.

THE PHYSICAL CONDITION OF THE SCHOOL CHILDREN.

Total Number of Children Examined.

(a) At Systematic Examinations.

			No. of Examinations.
Infants . . .	Boys, 2,827 ; Girls, 2,990	= 5,817	
12-year-olds . . .	„ 2,638 ; „ 2,644	= 5,282	
16-year-olds . . .	„ 198 ; „ 254	= 452	
		—	11,551
<i>Nursery Schools—</i>			
Lochrin . . .	Boys, 9 ; Girls, 33	= 42	
Tynecastle . . .	„ 3 ; „ 8	= 11	
		—	53
Merchant Company Schools			1,406
Royal High			137
Royal High (Preparatory)			131
Special Schools : Examinations and Re-examinations			1,408
		—	14,686

(b) Special Cases.

Psychological Examinations	306
Special Cases at Schools	12,219
Special Cases at Clinics	10,093
Neglect Cases	8,877
Children, aged 7, examined <i>re</i> Vision and Hearing	5,071
Class Inspections	27,801
Re-examinations	2,783
Examinations in connection with Employment Act	*2,556
Children for Humbie	310
Children at Humbie	300
In connection with Milk Scheme	†3,949
Children immunised against Diphtheria	2,264
	—
	76,529
Total Number of Examinations	91,215

* Of this number, 6 were found to be medically unfit, and were dismissed from their employment.

† Of this number, 1,778 were recommended for free milk.

Number of Children Notified to Parents as Suffering from Defects.

At systematic examinations 2,725 notices were issued. Of these, 907 or 33·2 per cent. were in connection with defective vision ; 528 or 19·3 per cent. for tonsils and adenoids, otorrhœa, etc. ; 513 or 11·5 per cent. for teeth ; 448 or 16·4 per cent. for dirty or verminous condition of head ; 329 or 12·1 per cent. for other conditions. If the number of notices given at class-room inspections be added, the total is 7,952.

Supervision.

Of the 12,219 special cases seen at schools, 739 were re-examined, and 450 or 60·9 per cent. were cured or improved. At routine inspections 1,652 cases were placed under medical supervision. For these, there were 2,944 re-examinations, and 1,376 or 46·7 per cent. were cured or improved.

Insufficiency of Clothing and Footgear.

The Committee of the Police-Aided Scheme supplied boots and clothing to 6,000 children. Through the kindness of the Leith Provident Society, 91 pairs of boots were supplied to necessitous children ; 113 children were supplied with boots by the Education Committee on condition that they were paid for by the parents ; boots and clothing were supplied to 280 necessitous children under Section 6 of the 1908 Act ; from the Flora Stevenson Fund, 134 pairs of boots were distributed.

Heights and Weights

		Number Examined.	Average Height in Inches.	Average Weight in Pounds.
<i>Boys—</i>				
	Infants	2,835	42·3	41·4
	12 year-olds	2,424	56·5	78·9
	16-year-olds	203	64·3	112·9
<i>Girls—</i>				
	Infants	2,953	41·9	39·6
	12-year-olds	2,537	57·1	80·6
	16-year-olds	222	63·2	111·2

Cleanliness of Head.

				Number. Examined.	Nits.		Verminous.		Dirty.	
					Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Boys—</i>										
	Infants	.	.	2,827	11	0·4	3	0·1	1	0·03
	12-Year-Olds	.	.	2,638	6	0·2	2	0·07	1	0·03
	16-Year-Olds	.	.	198	...	...	...	...	...	...
<i>Girls—</i>										
	Infants	.	.	2,990	303	10·1	10	0·3	...	...
	12-Year-Olds	.	.	2,644	304	11·5	5	0·1	...	...
	16-Year-Olds	.	.	254	3	1·2	1	0·4	...	...
Total				11,551	627	5·4	21	0·2	2	0·02

Cleanliness of Body.

				Number. Examined.	Dirty.		Verminous.	
					Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>								
	Boys	.	.	2,827	3	0·1	1	0·03
	Girls	.	.	2,990	3	0·1	1	0·03
<i>12-Year-Olds—</i>								
	Boys	.	.	2,638	4	0·1	...	...
	Girls	.	.	2,644	1	0·03	...	...
<i>16-Year-Olds—</i>								
	Boys	.	.	198	...	...	...	...
	Girls	.	.	254	...	...	...	...
Total				11,551	11	0·1	2	0·02

Condition of Skin.

(a) Head.

	Number Examined.	Ringworm.		Impetigo.		Others.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>							
Boys	2,827	1	0·03	8	0·3	6	0·2
Girls	2,990	...	...	24	0·8	14	0·4
<i>12-Year-Olds—</i>							
Boys	2,638	...	...	4	0·1	9	0·3
Girls	2,644	...	...	3	0·1	14	0·4
<i>16-Year-Olds—</i>							
Boys	198	...	...	...	...	4	2·02
Girls	254	...	...	...	...	2	0·8
Total	11,551	1	0·01	39	0·3	49	0·4

(b) Body.

	Number. Examined.	Ringworm.		Impetigo.		Others.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>							
Boys	2,827	1	0·03	7	0·2	38	1·3
Girls	2,990	1	0·03	5	0·1	28	0·8
<i>12-Year-Olds—</i>							
Boys	2,638	...	...	1	0·03	58	2·1
Girls	2,644	5	0·1	1	0·03	40	1·5
<i>16-Year-Olds—</i>							
Boys	198	...	...	...	...	5	2·5
Girls	254	...	...	...	...	7	2·7
Total	11,551	7	0·06	14	0·1	176	1·5

Nutrition.

	Number. examined.	Above Average.		Average.		Below Average.		Bad Nutrition.	
		Number.	Per Cent.	Number.	Per Cent.	Number	Per Cent.	Number.	Per Cent.
<i>Infants—</i>									
Boys	2,827	786	27·8	1,794	63·4	245	8·7	2	0·1
Girls	2,990	691	23·1	1,937	64·7	360	12·1	2	0·1
<i>12-Year-Olds—</i>									
Boys	2,638	686	26·0	1,700	64·4	252	9·6	...	...
Girls	2,644	751	28·4	1,674	63·3	219	8·3	...	...
<i>16-Year-Olds—</i>									
Boys	198	84	42·4	109	55·1	5	2·5	...	...
Girls	254	98	38·6	150	59·1	5	1·9	1	0·4
Total	11,551	3,096	26·8	7,364	63·7	1,086	9·4	5	0·04

Teeth.

	Number examined.	Sound.		1-4 Decayed.		5 or more Decayed.		Oral Sepsis.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>									
Boys .	2,827	785	27·8	1,637	57·9	405	14·3	106	3·7
Girls .	2,990	792	26·5	1,852	61·9	346	11·6	95	3·1
<i>12-Year-Olds—</i>									
Boys .	2,638	1,195	45·3	1,354	51·3	89	3·4	18	0·7
Girls .	2,644	1,249	47·2	1,308	49·5	87	3·3	19	0·7
<i>16-Year-Olds—</i>									
Boys .	198	85	42·9	107	54·1	6	3·0	2	1·0
Girls .	254	99	38·9	151	59·5	4	1·6	2	0·8
Total	11,551	4,205	36·4	6,409	55·5	937	8·1	242	2·1

Nose, Throat and Glands.

(a) Nose.

	Number Examined.	Catarrh.		Obstruction.		Other Diseases.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>							
Boys .	2,827	181	6·4	10	0·3	4	0·1
Girls .	2,990	146	4·8	7	0·2	7	0·2
<i>12-Year-Olds—</i>							
Boys .	2,638	39	1·4	5	0·1	...	...
Girls .	2,644	36	1·4	5	0·1	2	0·07
<i>16-Year-Olds—</i>							
Boys .	198	3	1·5	1	0·5	...	...
Girls .	254	1	0·4	1	0·4	1	0·4
Total .	11,551	406	3·5	29	0·2	14	0·1

(b) Throat.

	Number examined.	Tonsils.				Adenoids.				Other Diseases.	
		Slightly Enlarged.		Markedly Enlarged.		Probably Present.		Present.		No.	Per Cent.
		No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.		
<i>Infants—</i>											
Boys .	2,827	579	20·4	168	5·9	206	7·2	24	0·8	1	0·03
Girls .	2,990	668	22·3	148	4·9	179	5·9	19	0·6	...	...
<i>12-Year-Olds—</i>											
Boys .	2,638	336	12·7	66	2·5	52	1·9	1	0·03	1	0·03
Girls .	2,644	400	15·1	85	3·2	41	1·5	8	0·3	3	0·1
<i>16-Year-Olds—</i>											
Boys .	198	17	8·5	5	2·5	4	2·0	...	...	...	...
Girls .	254	18	7·1	3	1·2	...	...	1	0·4	...	...
Total .	11,551	2,018	17·5	475	4·1	482	4·1	53	0·5	5	0·04

(c) *Lymphatic Glands.*(1) *Submaxillary Glands.*

	Number Examined.	Palpably Enlarged.		Markedly Enlarged.		Cicatrices.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>							
Boys	2,827	81	2·8	5	...	1	0·03
Girls	2,990	73	2·4	1	0·03	3	0·1
<i>12-Year-Olds—</i>							
Boys	2,638	46	1·7	2	0·07	12	0·4
Girls	2,644	44	1·6	1	0·03	8	0·3
<i>16-Year-Olds—</i>							
Boys	198	1	0·5	...	...	...	...
Girls	254	2	0·8	...	...	...	...
Total	11,551	247	2·1	9	0·08	24	0·2

(2) *Cervical Glands.*

	Number examined.	Palpably Enlarged.		Markedly Enlarged.		Suppurating.		Cicatrices.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>									
Boys	2,827	293	10·3	11	0·4	...	...	10	0·3
Girls	2,990	224	7·4	12	0·4	...	...	9	0·3
<i>12-Year-Olds—</i>									
Boys	2,638	154	5·8	6	0·2	...	...	17	0·6
Girls	2,644	120	4·5	3	0·1	...	...	20	0·7
<i>16-Year-Olds—</i>									
Boys	198	3	1·5	...	...	...	...	1	0·5
Girls	254	5	1·9	...	...	...	...	...	...
Total	11,551	799	6·9	32	0·3	...	...	57	0·5

External Eye Diseases.

	Number examined.	Blepharitis.		Conjunctivitis.		Corneal Opacities.		Strabismus.		Other Diseases.	
		No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.
<i>Infants—</i>											
Boys	2,827	12	0·4	6	0·2	2	0·07	113	3·9	17	0·6
Girls	2,990	38	1·2	8	0·2	4	0·1	112	3·7	9	0·3
<i>12-Year-Olds—</i>											
Boys	2,638	7	0·2	3	0·1	3	0·1	51	1·9	6	0·2
Girls	2,644	9	0·3	5	0·1	3	0·1	59	2·2	7	0·2
<i>16-Year-Olds—</i>											
Boys	198	1	0·5	...	...	...	...	3	1·5	1	0·5
Girls	254	...	...	...	...	...	...	5	1·9	1	0·4
Total	11,551	67	0·6	22	0·2	12	0·1	343	2·9	41	0·3

Visual Acuity.

	Number Examined.	Good—6/6.		Fair—6.9 and 6'12.		Bad—6 18 and worse	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>12-Year-Olds—</i>							
Boys	2,638	2,066	78.3	340	12.9	232	8.6
Girls	2,644	2,013	76.1	381	14.4	250	9.5
<i>16-Year-Olds—</i>							
Boys	198	161	81.3	18	9.1	19	9.6
Girls	254	196	77.2	26	10.2	32	12.6
Total	5,734	4,436	77.4	765	13.3	533	8.2

Ears.

	Number Examined.	Otorrhœa.		Wax.		Other Diseases.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>							
Boys	2,827	31	1.1	4	0.1	5	0.1
Girls	2,990	39	1.3	5	0.1	12	0.4
<i>12-Year-Olds—</i>							
Boys	2,638	13	0.4	2	0.07	8	0.3
Girls	2,644	12	0.4	2	0.07	2	0.07
<i>16-Year-Olds—</i>							
Boys	198	2	1.0	1	0.5	...	...
Girls	254	2	0.8	...	...	...	...
Total	11,551	99	0.8	14	0.1	27	0.2

Hearing.

	Number Examined.	Slightly Deaf.		Markedly Deaf.	
		Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>					
Boys	2,827	16	0.5	...	...
Girls	2,990	7	0.2	...	...
<i>12-Year-Olds—</i>					
Boys	2,638	14	0.5	2	0.07
Girls	2,644	14	0.5	1	0.03
<i>16-Year-Olds—</i>					
Boys	198	1	0.5	1	0.5
Girls	254	2	0.8	...	...
Total	11,551	54	0.5	4	0.03

Speech.

	Number Examined.	Defective Speech.		Stammering.	
		Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>					
Boys	2,827	10	0.3	4	0.1
Girls	2,990	8	0.2	1	0.03
<i>12-Year-Olds—</i>					
Boys	2,638	6	0.2	14	0.5
Girls	2,644	...	...	2	0.07
<i>16-Year-Olds—</i>					
Boys	198	...	...	...	...
Girls	254	...	...	...	...
Total	11,551	24	0.2	21	0.2

Mental Condition.

					Number Examined.	Dull or Backward.	
						Number.	Per Cent.
<i>Infants—</i>							
Boys	.	.	.	.	2,827	3	0.1
Girls	.	.	.	.	2,990	3	0.1
<i>12-Year-Olds—</i>							
Boys	.	.	.	.	2,638	3	0.1
Girls	.	.	.	.	2,644	2	0.07
<i>16-Year-Olds—</i>							
Boys	.	.	.	.	198	...	...
Girls	.	.	.	.	254	...	...
Total					11,551	11	0.1

Heart and Circulation.

Organic Heart Disease.										
		Number examined.	Congenital.		Acquired.		Functional Disorder.		Anæmia.	
			Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>										
Boys	.	2,827	13	0.4	5	0.1	16	0.5	29	1.0
Girls	.	2,990	5	0.1	7	0.2	14	0.4	17	0.5
<i>12-Year-Olds—</i>										
Boys	.	2,638	5	0.1	15	0.5	12	0.4	32	1.2
Girls	.	2,644	7	0.2	20	0.7	14	0.5	18	0.6
<i>16-Year-Olds—</i>										
Boys	.	198	...	...	...	...	2	1.0	...	...
Girls	.	254	...	...	1	0.4	3	1.2	1	0.4
Total		11,551	30	0.3	48	0.4	61	0.6	97	0.9

Lungs.

	Number examined.	Chronic Bronchitis.		Tuberculosis.		Suspected Tuberculosis.		Other Diseases.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>									
Boys .	2,827	62	2.1	...	...	3	0.1	44	1.5
Girls .	2,990	57	1.9	...	...	1	0.03	32	1.1
<i>12-Year-Olds—</i>									
Boys .	2,638	16	0.6	...	...	1	0.03	32	1.2
Girls .	2,644	4	0.1	...	...	1	0.03	21	0.8
<i>16-Year-Olds—</i>									
Boys .	198	1	0.5	...	...	...	...	...	...
Girls .	254	...	...	...	...	...	...	...	...
Total	11,551	140	1.2	...	...	6	0.05	129	1.1

Nervous System.

	Number examined.	Epilepsy.		Chorea.		Infantile Paralysis.		Other Diseases.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>									
Boys .	2,827	4	0.1	1	0.03	3	0.1	10	0.3
Girls .	2,990	1	0.03	1	0.03	1	0.03	9	0.3
<i>12-Year-Olds—</i>									
Boys .	2,638	2	0.07	2	0.07	1	0.03	9	0.3
Girls .	2,644	2	0.07	3	0.1	3	0.1	9	0.3
<i>16-Year-Olds—</i>									
Boys .	198	...	...	1	0.5	...	...	1	0.5
Girls .	254	...	...	...	...	...	...	...	...
Total	11,551	9	0.08	8	0.07	8	0.07	38	0.3

Tuberculosis.

	Number examined.	Glands.		Bones and Joints.		Abdominal.		Other Forms.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>									
Boys .	2,827	1	0.03	...	...	1	0.03	...	...
Girls .	2,990	2	0.06	2	0.06	2	0.06	...	...
<i>12-Year-Olds—</i>									
Boys .	2,638	2	0.07	1	0.03	1	0.03	...	...
Girls .	2,644	1	0.03	7	0.2	...	...	...	...
<i>16-Year-Olds—</i>									
Boys .	198	...	...	...	...	...	...	...	...
Girls .	254	...	...	...	...	...	...	...	...
Total	11,551	6	0.05	10	0.09	4	0.03	...	...

Rickets.

	Number Examined.	Slight.		Marked.	
		Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>					
Boys .	2,827	74	2.6	3	0.1
Girls .	2,990	20	0.6	1	0.03
<i>12-Year-Olds—</i>					
Boys .	2,638	26	0.9	6	0.2
Girls .	2,644	11	0.4	1	0.03
<i>16-Year-Olds—</i>					
Boys .	198	2	1.0	...	...
Girls .	254	...	...	...	...
Total	11,551	133	1.1	11	0.1

Deformities.

	Number Examined.	Congenital.		Acquired.	
		Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>					
Boys . . .	2,827	9	0·3	20	0·7
Girls . . .	2,990	6	0·2	11	0·3
<i>12-Year-Olds—</i>					
Boys . . .	2,638	4	0·1	42	1·5
Girls . . .	2,644	5	0·1	17	0·6
<i>16-Year-Olds—</i>					
Boys . . .	198	...	...	1	0·5
Girls . . .	254	...	...	3	1·2
Total . . .	11,551	24	0·2	94	0·8

Infectious or Contagious Diseases.

(These are given under Skin Diseases and Tuberculosis.)

Vaccination.

	Number Examined.	No Mark.	
		Number.	Per Cent.
<i>Infants—</i>			
Boys	2,827	558	19·7
Girls	2,990	660	22·1
<i>12-Year-Olds—</i>			
Boys	2,638	372	14·1
Girls	2,644	406	15·3
<i>16-Year-Olds—</i>			
Boys	198	10	5·1
Girls	254	16	6·3
Total	11,551	2,022	17·5

SPECIAL SCHOOLS AND CLASSES.

Special Schools.—The following is a list of the Special Schools and Classes which were open during the session, and the number of pupils on the roll as at the close of the session :—

For Mentally Defective Children—

Balfour Place	199
Duncan Street	97
St. Christopher's	89
St. Nicholas	84
	<u>469</u>

For Ineducable Children—

Slateford Occupation Centre	<u>77</u>
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For Physically Defective Children—

Clarebank	143
Duncan Street	57
Gorgie	134
Willowbrae	120
	<u>454</u>

For Children Suffering from Ringworm—

Lauriston Place	<u>9</u>
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<i>For Delicate Children—</i>		<i>For Cripple Children—</i>	
Humbie	30	Challenger Lodge	*25
	<u> </u>	Douglas Home	+22
		Taught at home by Visiting Teachers	20
			<u> </u>
<i>For Children Suffering from High Myopia—</i>			67
Myopia School	60		<u> </u>
	<u> </u>	<i>For Hard-of-Hearing Children—</i>	
		1 Centre	25
			<u> </u>
<i>For Children Suffering from Tuberculosis—</i>		<i>For Stammering Children—</i>	
Colinton Mains Hospital Class.	19	5 Centres	58
	<u> </u>		<u> </u>

* Of this number, the Education Committee paid for the maintenance of 5.

† " " " " " " 2.

Physically Defective Children.

There were 454 pupils on the roll at the end of the session classed as physically defective. The following is a rough classification of the defects found :—

Paralysis of various types	37
Tubercular diseases of—	
Bones	11
Hip Joint	9
Abdomen	14
Glands	18
Spinal Cases	8
Rickets	21
Accidents	9
Heart Affections	77
Speech defects	11
Otorrhœa and Deafness	14
Lung Disease (bronchitis and pre-tubercular cases)	85
Defective vision	8
Malnutrition	34
Other conditions	98
	<u> </u>
	454
	<u> </u>

One hundred and seventy-five pupils left during the session. The reasons for leaving were :—Returned to ordinary schools, 51 ; transferred to other special schools, 34 ; over-age, 63 ; medically exempted, 19 ; left district, 7 ; died, 1.

Mentally Defective Children.

Investigation of Cases.—Children are referred for investigation with regard to mental deficiency from many sources, including :—Head Teachers, Medical Officers, Hospitals, Police Courts, Clinics and outside Societies. A report from the Head Teacher is obtained on prescribed forms and the child then examined medically and tested psychologically. All the reports are considered and recommendations made to the Education Committee who decide as to the child's disposal—whether ineducable, for Institution, Special School, or otherwise.

The number of cases examined psychologically and reported on during the session was 306.

The disposal of these was as follows :—

Passed for Special Schools	85
Passed for Special Schools (on probation)	27
Considered dull	122
Considered backward	*6
Continued for further consideration	†36
Considered ineducable	‡29
Recommended for admission to Certified Institution	1
	<hr/>
	306
	<hr/>

* 2 of this number were recommended for P.D. School.

† 1 of this number was recommended for P.D. School.

‡ 12 of this number were considered suitable for Occupation Centre.

There were 469 mentally defective pupils on the roll at the end of the session. These have been classed according to the progress made during the session :—

Good	220 or 46·9 per cent.
Fair	180 „ 38·4 „
Little progress	69 „ 14·7 „

One hundred and eighteen pupils left during the session. The reasons for leaving were as follows :—Transferred to other special schools, 8 ; sent to Institution, 8 ; over-age, 80 ; medically exempted, 2 ; left district, 14 ; granted temporary exemption before attaining 16 years, 1 ; ineducable, 5.

The temporary exemption granted is conditional upon satisfactory reports at specified intervals being received from the Medical and Attendance Departments ; the pupil's name is not removed from the school roll.

In the case of pupils leaving to go to work, inquiry is made by the teacher as to the nature of the work, and advice given as to the work for which the pupil is best suited.

The number of educable defective children maintained by the Education Committee in Certified Institutions is as under :—

	Boys.	Girls.
Larbert	2	...
St. Joseph's R.C.	4	...
Gogarburn	13	6
	<hr/>	<hr/>
	19	6
	<hr/>	
	25	
	<hr/>	

Blind and Partially Blind Children and Deaf and Mute Children.

Blind, Deaf-Mute and Epileptic Children.—Blind and deaf-mute children are dealt with under the powers of the Education of Blind and Deaf-Mute Children (Scotland) Act, 1890, and epileptic children under the Education of Defective Children (Scotland) Act, 1906, as read with the Education Acts of 1908 and 1918. The Education Committee assumes responsibility for the maintenance and education of such children in special institutions. The following shows the institutions to which children have been sent, and the number of children maintained there as at the end of the session :—

	Boys.	Girls.
Royal Blind Asylum, Edinburgh	8	7
Deaf and Dumb Institution, Edinburgh	12	13
Donaldson's Hospital, Edinburgh	5	6
St. Vincent's R.C. School, Glasgow	1	1
Colony for Epileptics, Bridge of Weir	2	1
	28	28
	56	

Blind Persons' Act, 1920.—The Education Committee are responsible for the technical training at the Royal Blind Asylum workshops of 9 adult blind persons (7 men and 2 women). The training consists of basket-making, brush-making, and mat-making for men, and machine-knitting for women ; in the case of special men trainees, instruction in piano-tuning is given, and in the case of special women trainees instruction in massage.

Pupils Suffering from Ringworm.

Lauriston Place Special School.—This school has accommodation for 60 pupils, and during the session 40 pupils attended, 25 being discharged cured. Of the 25 cases cured, 3 had X-ray treatment, 2 drug treatment, and 20 thallium acetate treatment.

Special School at Humble.

Humble Special School.—This school is carried on by the Education Committee under an arrangement with the Edinburgh Children's Holiday Fund, and has accommodation for 42 pupils. The Education Committee, who are Managers of the School, and have complete control of the education of the children in residence, pay a sum to meet the cost of food and lodging for the children. A charge is made appropriate to the parents' circumstances in each case.

There are two teachers, and 310 children attended during the session.

The majority of the children suffer from debility and anæmia, though a fair number are cases recovering from illnesses or operations.

Arrangements for Physical Education and Personal Hygiene of Children.

PHYSICAL EDUCATION.

Physical education is included in the syllabus of all the Education Committee's schools. In the elementary schools, the instruction is given by class and visiting teachers in accordance with the Board of Education Syllabuses of Physical Exercises, and Physical Exercises for infant classes. In the intermediate and secondary schools the instruction is given by specialist teachers of physical education. The staff consists of a Superintendent, Assistant Superintendent, and 34 assistant teachers (20 women and 14 men). The whole of the physical education, including swimming, in both day and evening schools, is under the direct supervision of the Superintendent. All exercises, as far as possible, are carried out in the open air.

BATHS.

Swimming.

There are seven school baths, and the staff for these consists of seven teachers (4 women, 3 men). In addition, six Corporation baths and the attendant instructors are extensively utilised.

Arrangements for Feeding of Children.

Administration.

Under the Education Committee's present arrangement, dinners are supplied to three groups of children :—(1) necessitous, supplied free ; (2) pupils whose parents pay at the rate of 1½d. per dinner ; (3) a special two-course dinner at a higher rate for special schools and some of the secondary schools.

Supply of Milk to School Children.—The Education Committee's scheme for the supply of milk to school children continued to operate successfully during the year. A daily ration of milk was provided, free of charge, to 1,520 children on the free food roll at schools in congested districts and who were certified by the medical staff to be in need of additional nutriment, and to 22,665 children on the payment of cost. One hundred and two schools are now participating, and the total number of milk meals supplied during the year was 4,853,516, representing 200,086 gallons.

Arrangements for Medical Treatment.

The medical treatment provided by the Education Committee is best described under two heads :—(1) work done at clinics ; (2) arrangements made for the treatment of ringworm.

Clinics are held as under :—

1. Treatment Centres at 45 Lauriston Place, Edinburgh, and 5 Links Place, Leith.
2. Sub-Clinic at Niddrie : Medical Officer once weekly and Nurses twice weekly.
3. Nurses' Sub-Clinics for minor ailments at Dalry School, St. John's School and Regent Road School twice weekly.
4. Nurses' Sub-Clinics at Special Schools (Balfour Place, Clarebank, Gorgie Special, St. Nicholas and St. Christopher's) twice weekly. A nurse attends daily at Duncan Street and Willowbrae Special Schools.
5. Occupation Centre : Nurse once weekly.

The following shows the number of cases and the number of attendances at these Clinics :—

	No. of Cases.	No. of Attendances.		No. of Cases.	No. of Attendances.
Lauriston . . .	4,047	15,491	St. John's . . .	265	857
Links Place . . .	2,629	11,201	Regent Road . . .	110	725
Niddrie . . .	1,502	4,098	Special Schools . . .	674	5,034
Dalry . . .	507	1,655	Occupation Centre . . .	243	631
	<u>8,685</u>	<u>32,445</u>	Craigentinny . . .	116	263
				<u>1,408</u>	<u>7,510</u>

Totals : 10,093 Cases ; 39,955 Attendances.

The Staff at Lauriston Place Centre consists of :—(1) visiting medical officers ; (2) four dentists, one oculist, and one aurist (all part-time) ; (3) three whole-time nurses who assist the oculist, aurist and dentists, and, in addition, carry out treatment of minor ailments ; (4) one nurse for treatment of itch cases.

The Staff at Links Place Centre consists of :—(1) visiting medical officers ; (2) two dentists, one oculist, and one aurist (all part-time) ; (3) two whole-time nurses who assist oculist, aurist and dentists, and, in addition, carry out treatment of minor ailments ; (4) an attendant for treatment of itch cases.

Treatment is given free when the average weekly income of the family, after deducting house rent, does not exceed 10s. per head. In other cases, a charge of 2s. 6d. is made, this charge to cover any necessary treatment carried out at the Clinic for a period of a year. The amount received in payment for treatment during the session was £255 representing 2,040 children.

Any necessary investigation is made by the Attendance Department.

There is a special school for pupils suffering from ringworm at 41 Lauriston Place, where treatment is carried out by the nurse.

Ringworm.—Children suffering from ringworm are treated at the Royal Infirmary by X-rays or Thallium Acetate. The nurse attached to the special skin school carries out the after-treatment of these cases.

Treatment of Scabies.—Provision is made at Lauriston Place and Links Place treatment centres for the treatment of scabies. Baths are fitted up, and a special nurse and attendant supervise the bathing and ointment treatment of the pupils. The pupils, their clothing, the house and bedding are disinfected when a cure is effected. The following are the results for the session, viz. :—*Lauriston Place Centre*—number cured :—Boys, 145 ; girls, 134—Total, 279. The number of attendances made was 1,650. *Links Place Centre*—number cured :—Boys, 109 ; girls, 127—Total 236. The number of attendances made was 3,071. The number of children bathed and disinfected at the Public Disinfecting Station was :—Boys, 131 ; girls, 121—Total, 252. Sets of clothing disinfected, 307 ; and one bed.

Skin Diseases at Lauriston Treatment Centre.—The number of children who were examined by the Skin Specialist was 563 (boys, 294 ; girls, 269), and the number of attendances was 3,097.

Defective Vision and External Eye Diseases.—The following are the oculists' reports on cases of defective vision, etc., detected by school doctors in the different schools and referred for further examination.

Lauriston Place Treatment Centre.—Altogether 2,391 children were examined for defective vision, of whom 1,863 were found to require glasses. The number of attendances was 3,139. In 151 cases lenses were not prescribed, either owing to the error of refraction being only of a slight degree or because, as some other disease of the eyes was present, little benefit would have been derived from glasses.

In addition to the children who attended for examination of their vision, a large number (367) were treated for external diseases of the eye, the total number of attendances for treatment being 2,824. The treatment is carried out by the school nurse, under the supervision of the oculist. In cases where the treatment could be carried out by the parents at home, they have been shown by the nurse how to apply it.

Links Place Treatment Centre.—In all, 873 cases were examined, making 1,211 attendances. A great proportion of these cases were pupils with defective vision. Lenses were not prescribed unless definite visual benefit or the relief of asthenoptic symptoms was likely to result. Lenses were prescribed for 466 pupils.

In addition to the above, a large number of cases of external eye disease was seen. Treatment was carried out by the school nurse under the supervision of the oculist.

Provision of Spectacles.—There were 1,391 pairs of spectacles supplied during the year by the Education Committee; 369 pairs were given free, while 1,022 were paid for by the parents.

REPORTS BY AURISTS.

Lauriston Place Treatment Centre.—There were 696 examined—382 boys and 314 girls, the number of attendances for the session being 777.

The following conditions were found :—impacted cerumen, 168; chronic otitis media suppurativa, 184; enlarged tonsils and adenoids, 520.

Palliative remedies are employed at the clinic, such as syringing for discharge, wax, and foreign bodies, douching of nose, politzerisation, etc.

Links Place Treatment Centre.—There were 331 cases examined, making 382 attendances. The number recommended for T. and A. operation was 250.

It is interesting to note that, in future, children operated on for tonsils and adenoids will be supervised by their teachers in school, so that proper nose breathing after the operation will be assured.

Defective Teeth.

The pupils selected this session for dental treatment were pupils 6 years old, 9 years old, and 12 years old. The dentists visit the schools, examine the children and note on charts the condition of the teeth. Where treatment is necessary, a card is sent to parents, and on their signing that they are unable otherwise to secure treatment, and that they consent to the necessary treatment being carried out, notices are issued telling them when to bring the child to the treatment centre.

The following is the record of work done at the dental clinics for the session :—

One hundred and five schools were visited. (Edinburgh, 84 ; Leith, 21.)

The total number of children who received dental treatment was 7,156. It is often difficult to get parents to realise the importance of preventive treatment. Most of the special cases have been sent by the medical staff ; here, the ill-health or pain arising from bad teeth makes parents resort at once to treatment. Included in the special cases are many children who refused treatment when examined as routine cases at 6 or 9 years.

The number examined was :—

A. Lauriston Place Treatment Centre.—Boys, 5,783 ; girls, 5,832—Total, 11,615.

There were also examined 543 children (boys, 288 ; girls, 255) attending special schools whose ages were other than 6, 9 and 12 years.

B. Links Place Treatment Centre.—Boys, 2,485 ; girls, 2,505—Total, 4,990.

Condition of Teeth.—The condition of the teeth is noted in every case, and also the treatment necessary, extraction, filling, etc.

I. Numbers with Clean Mouths and no evidence of Dental Caries.

A. Boys, 1,926 ; Girls, 1,775—Total, 3,701 or 31·9 per cent. of number examined.

B. Boys, 500 ; Girls, 527—Total, 1,027 or 20·6 per cent. of number examined.

II. Numbers with Dental Caries.

<i>A.</i> 6-year-olds—Boys, 1,159 ; Girls, 1,224—2,383	} 7,914 or 68·1 per cent. of number examined.
9-year-olds—Boys, 1,283 ; Girls, 1,390—2,673	
12-year-olds—Boys, 1,415 ; Girls, 1,443—2,858	

<i>B.</i> 6-year-olds—Boys, 669 ; Girls, 642—1,311	} 3,963 or 79·4 per cent. of number examined.
9-year-olds—Boys, 706 ; Girls, 707—1,413	
12-year-olds—Boys, 610 ; Girls, 629—1,239	

The following table gives the number of pupils in each age group, with carious teeth—(a) four or less ; (b) more than four :—

		(a) With four or less Carious Teeth.			(b) With more than four Carious Teeth.		
		6 Years.	9 Years.	12 Years.	6 Years.	9 Years.	12 Years.
A.	Boys	644	899	1,147	515	384	268
	Girls	694	947	1,161	530	443	282
	Total	1,338	1,846	2,308	1,045	827	550
B.	Boys	405	599	588	264	107	22
	Girls	427	587	600	215	120	29
	Total	832	1,186	1,188	479	227	51
Grand Total . .		2,170	3,032	3,496	1,524	1,054	601

A. Of the 7,914 (plus 543 of other ages examined in Special Schools) requiring dental treatment, 2,389 or 30·2 per cent. accepted the services of the school clinic.

It should be noted that the dentists visited, for inspection purposes, most of the outlying schools, where the number of acceptances for treatment was very small.

In addition to the above, 2,263 pupils—1,033 boys, 1,230 girls—were treated as special cases, so that in all 4,652 pupils received dental treatment.

B. Of the 3,963 requiring dental treatment, 1,629 or 41·1 per cent. accepted the services of the school clinic. 110 pupils out of the 3,963 had dental caries, but no treatment was advised meantime, leaving 3,853 who had notices issued.

In addition, 1,151 pupils (539 boys, 612 girls) were treated as special cases, so that in all 2,517 pupils received dental treatment, making 2,660 visits.

Analysis of Dental Treatment.

(a) Conservation.

		Teeth Filled.		Teeth Conserved by Treatment.		Total Number of Teeth Conserved.
		Temporary.	Permanent.	Temporary.	Permanent.	
A.	Boys	2	900	...	28	930
	Girls	19	1,184	...	46	1,249
	Total	21	2,084	...	74	2,179
B.	Boys . . . .	...	24	1	5	30
	Girls . . . .	...	90	1	90	181
	Total . . . .	...	114	2	95	211
Grand Total . .		21	2,198	2	169	2,390

(b) Extraction.

		Number of Teeth Extracted.		Total.	Anæsthetics.
		Temporary.	Permanent.		
A.	Boys	5,383	1,709	7,092	1,632
	Girls	6,623	2,310	8,933	1,917
	Total	12,006	4,019	16,025	3,549
B.	Boys	1,763	860	2,623	988
	Girls	1,894	1,102	2,996	1,115
	Total	3,657	1,962	5,619	2,103
Grand Total . .		15,663	5,981	21,644	5,652

NOTE.—A. refers to Dental Treatment at 45 Lauriston Place.
B. refers to Dental Treatment at 5 Links Place, Leith

ROYAL HIGH AND EDINBURGH MERCHANT COMPANY SCHOOLS.

	Edinburgh Ladies' College.		George Watson's Ladies' College.		George Watson's Boys.		Daniel Stewart's.		Royal High.		Royal High Prep.	
	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.
Total number examined	397	...	343	...	454	...	212	...	137	...	131	...
Examin'd by School Doctor	233	58·7	222	64·7	254	55·9	55	25·9	116	84·7	100	76·3
Examin'd by Family Doctor	164	41·3	121	35·3	200	44·1	157	74·1	21	15·3	31	23·7
<i>Teeth—</i>												
None decayed	288	72·5	275	80·2	382	84·1	144	67·9	115	83·9	41	31·3
1 to 5 ..	102	25·7	59	17·2	63	13·9	63	29·7	20	14·6	75	57·2
6 to 10 ..	7	1·8	9	2·6	9	2·0	5	2·4	2	1·5	15	11·5
Stoppings	15	3·7	126	36·7	85	18·7	22	10·3	36	26·3	16	12·2
<i>Visual Acuity—</i>												
6/6	328	94·8	283	96·0	406	91·2	198	93·4	120	87·6	92	83·6
6/9—6/12	12	3·5	9	3·0	16	3·6	9	4·2	12	8·8	12	10·9
6/18 and above	6	1·7	3	1·0	23	5·2	5	2·4	5	3·6	6	5·5
<i>Eyes—</i>												
Wearing Glasses	40	10·0	31	9·0	24	5·2	5	2·3	15	1·1	4	3·0
External Eye Diseases	1	0·2	2	0·6	...	...	...	...	...	...	...	...
Squint	5	1·2	3	0·8	1	0·2	1	0·4	...	...	7	5·3
<i>Deafness</i>	3	0·7	1	0·3	...	...	1	0·4	1	0·7	2	1·5
<i>Mouth Breathers</i>	8	2·0	5	1·4	12	2·6	16	7·5	...	...	2	1·5
<i>Tonsils—</i>												
Enlarged	52	13·1	40	11·6	42	9·2	27	12·7	5	3·6	21	16·0
Tonsils and Adenoids Operation	113	28·4	92	26·8	155	34·1	48	22·6	50	36·5	33	25·9
<i>Glands—</i>												
Submaxillary	1	0·2	...	...	...	...	2	0·9	...	...	3	2·3
Cervical	30	7·6	27	7·8	...	...	9	4·2	...	...	7	5·3
Cicatrices	7	1·8	7	2·0	...	...	2	0·9	...	...	1	0·7
<i>Heart—</i>												
Valvular	2	0·5	1	0·3	...	...	...	...	...	...	...	...
Impure Sounds	2	0·5	4	1·1	...	...	...	...	...	...	1	0·7
Irregular	2	0·5	...	...	...	...	...	...	...	...	...	...
Anæmia	4	1·0	2	0·6	...	...	...	...	...	...	...	...
<i>Rheumatism</i>	3	0·7	...	...	...	...	...	...	...	...	1	0·7
<i>Any other observations</i>	8	2·0	1	0·3	8	1·7	...	...	3	2·2	4	3·0

Special Cases Examined : George Watson's Ladies' College 30
 Edinburgh Ladies' College 61
 91

PORT SANITARY ADMINISTRATION.

During the year Declarations of Health were received from 564 ships arriving from foreign ports, including 32 from ports infected or believed to be infected, and were detained for examination by the medical officer. No infectious illness or suspicious circumstances were discovered, and all were granted their clearance. It was not found necessary to send any ship to the special mooring stations.

The great majority of the foreign shipping comes from continental ports, but there are also a number of arrivals from North and South American ports, from North African, Indian and Far Eastern ports.

The number of ships entering the Port Sanitary District was 10,710, representing a tonnage of 2,962,230, a decrease of 132 vessels and 48,534 tons when compared with 1935.

AMOUNT OF SHIPPING ENTERING THE PORT SANITARY DISTRICT DURING THE YEAR 1936.

		Number.	Tonnage	Number Inspected.	Number Reported to be Defective.	Number of Notices Issued.
Foreign	Steamers	1,238	1,174,733	727	19	12
	Motor .	86	80,349	77	...	...
	Sailing .	...	...	...	...	...
	Fishing .	...	...	...	...	...
Total Foreign . . .		1,324	1,255,082	804	19	12
Coastwise	Steamers	5,363	1,351,703	280	6	5
	Motor .	16	3,874	16	...	...
	Sailing .	...	...	...	...	...
	Fishing .	4,007	351,571	338	...	...
Total Coastwise		9,386	1,707,148	634	6	5
Total Foreign and Coastwise . . .		10,710	2,962,230	1,438	25	17

Imports and Exports.—The principal items of cargo imported at Leith consist of wheat, barley, oats, maize, rye, flour, meal, sugar, fruit, cement, timber, guano, manure, flax, hemp, fish (fresh and cured), butter, eggs, and esparto grass. Of these the chief import is grain. The exports are chiefly coal, iron, oil, liquor, and ammonia. Coal is the greatest export.

Medical Inspection of Aliens.—During the year, 987 alien passengers arrived at the Port. Of these, 276 were subjected to medical inspection at the request of H.M. Alien Immigration Officer. Permission to land was given to 975 of these passengers, and 12 were refused leave to land, on non-medical grounds.

The alien passengers were classified as follows :—

CLASSIFICATION OF ALIEN PASSENGERS.

Resident Returning.	In Transit.	Visitors of Six Months or Less.		Diplomats and Persons on Foreign Government Missions.	Seamen.	Seamen under Contract to Join Ship in British Waters.	Ministry of Labour Permit.	Aliens Coming to Settle not Holding M.L. Permit.
		On Holiday, Tourists, etc.	On Business.					
17	32	677	140	7	2	44	40	16

Cases of Illness.—During the year, 4 cases of measles and 1 case of typhoid fever were noted amongst sailors arriving at Leith. The patients were sent to the City Hospital for treatment.

Ship Inspection and Fumigation.—The routine inspection of all ships is carried out as soon as possible after docking, and details of nuisances and defects found are contained in the report of the Chief Sanitary Inspector.

The inspection of ships for rat infestation is carried out under the Port Sanitary Regulations (Scotland), 1933, and under Article 19 of this Order, 135 Deratisation Exemption Certificates and 23 Deratisation Certificates were granted during the year. Of the latter, 8 refer to vessels which were fumigated after arrival from infected ports by reason of rat infestation, and since their previous certificates had expired. The number of exemption certificates indicated that ship-masters continue to appreciate the necessity for maintaining their vessels as free from rats as possible.

The fumigation of ships throughout the year was done by means of cyanogen chloride and proved highly satisfactory. Many owners have availed themselves of this method of fumigation of certain parts of their ships for the repression of vermin other than rats.

It has to be recorded that as in former years placards in connection with venereal disease are maintained in selected places in the docks. These are printed in English, Norwegian, Dutch, and German, and draw the attention of seamen and dockers to the existence and location of the Seamen's Dispensary at the Shore, where skilled treatment may be obtained.

FACTORIES AND WORKSHOPS.

The general administrative effect of Factory Legislation is to place all factories and workshops under a dual control, viz., the Home Office and the Local Authorities. As an indication that those requirements of the Factory and Workshop Acts which come under the supervision of the Local Authority are carried out, the following statistical information, based principally on the lines framed by the Home Secretary, gives a synopsis of the work done during the year under review.

1. INSPECTION.

Premises.	Number of		
	Inspections.	Written Notices.	Occupiers Prosecuted.
Factories	594	38	Nil.
Workshops }	1,120	27	Nil.
Workplaces } (Other than Outworkers' premises)			
Total	1,714	65	Nil.

2. DEFECTS FOUND.

Particulars	Number of Defects.			
	Found	Remedied	Referred to H.M. Inspector.	Number of Prosecutions.
Want of Cleanliness	103	103	...	...
Want of Ventilation	5	5	...	...
Overcrowding	1	1	...	...
Want of drainage of floors . . . . .	...	...	...	...
Other Nuisances	68	68	...	...
Sanitary Accommodation {	Insufficient	22	17	...
	Unsuitable or defective	115	110	...
	Not separate for sexes	14	12	...
Illegal Occupation of Underground Bakehouses (Sec. 101) . . . . .	...	...	...	...
Breach of provisions relating to Bakehouses— Scottish Board of Health (Factories and Workshops Transfer of Powers) Order, 1921 Sec. 99 Factory Act: Limewashing, etc., of Bakehouses	28	28	...	...
Other Offences :— (Excluding offences relating to outwork)	2	...	2	...
Total	358	*344	2	Nil.

*Note.—12 defects re sanitary accommodation were outstanding at 31st December, 1936.

3. HOME WORK—OUTWORKERS' LISTS (sec. 107).

	Feb. 1936.	Aug. 1936.
Total number of lists received	32	28
Number of Outworkers on lists (<i>i.e.</i> , those residing in Edinburgh).	72	60
(Note.—These figures include outworkers who may be working for more than one firm and therefore appear on more than one list.)		
Number of addresses of outworkers residing in other districts forwarded to other Local Authorities	10	8
Number of addresses of outworkers received from other Local Authorities	4	4
Actual number of outworkers on Register, at date of last Returns . . .	67	54
(Note.—The majority of these are home-workers but a number of them actually do the work in ordinary factories and workshops.)		
Nature of Work :—		
(1) Making, altering, repairing, etc., of wearing apparel.		
(2) Making up, ornamenting, repairing, etc., of table linen.		
(3) Making of boxes or other receptacles made wholly or partially of paper, cardboard, chip, or similar material.		
Outwork in Unwholesome Premises (Sec. 108)		Nil.
Outwork in Infected Premises (Secs. 109 and 110)		Nil.

4. REGISTERED FACTORIES AND WORKSHOPS.

Premises on Registers at end of year.

	Number.
Workshops (various trades)	930
Bakehouses { Factories	144
{ Workshops	46
{ Home Bakeries—premises not under the Factory Act	39
Underground Bakehouses in use at end of year	57

5. OTHER MATTERS.

Matters referred to H.M. Inspector of Factories :—

Failure to affix abstract of the Factory and Workshop Act (Sec. 133)	2
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Action taken in matters referred by H.M. Inspector of Factories :—

Matters remediable under the Public Health Act but not under the Factory Act	2
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Sanitary Accommodation for Factories and Workshops :—

Intimations received by Local Authority in order that work might be carried out according to Local Regulations	64
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Notices received for the information of Local Authority *re* Bakehouses :—

Scottish Board of Health (Factories and Workshops Transfer of Powers) Order, 1921,	7
--	---

Number of Notices of Occupation of Workshops received from H. M. District Inspector of Factories	30
--	----

Miscellaneous Complaints :—

Received from other Departments	Nil.
Anonymous	3
Received from Public	2

New Factories Bill.—It is now 36 years since a comprehensive measure amending our factory code was last enacted by Parliament, and as reference was made in last year's Annual Report to the effect that the present Government hoped to introduce a Bill for the revision and consolidation of the law relating to the safety, health, and welfare of factory workers, it should now be stated that this was done in February, 1937, and that the measure has since been read a second time in the House. The new Bill is not only a consolidating measure ; it is a revising measure, and will bring the provisions of the Factory Acts up to date in the light of modern standards and conditions. The new code simplifies the law by abolishing various out-of-date definitions, such as the distinction between textile and non-textile factories, and between factories and workshops, all premises being now defined as factories.

The system of dual control (*i.e.*, Home Office and Local Authority) at present existing, is proposed to be continued. Local Authorities, or as they are called in the Bill "District Councils"—meaning in Scotland, Town and County Councils—will be responsible for the provisions relating to cleanliness, overcrowding, ventilation, and drainage of floors in factories in which mechanical power is not used, with the addition of the provisions as to temperature in such premises. The Factory Act provisions as to sanitary conveniences, and the regulations thereunder, will in future apply throughout the whole country, and the enforcement of these in *all* factories is to be placed in the hands of Local Authorities.

The sanitary regulations of the existing Factory Act of 1901, applicable to bake-houses, are now embodied in the Third Schedule to the Bill, also the provision relating to the prohibition of employment of women after childbirth, and certain provisions with regard to home work. All these matters will continue to be administered by Local Authorities. The provisions in regard to means of escape in case of fire are considerably extended, and the enforcement of such provisions is left entirely in the hands of the Local Authorities.

Mention may be made here of only a few points in the new Bill. The requirements as to cleanliness are made more precise. The amount of cubic feet per person is increased from 250 to 400, subject to a saving clause in the case of existing workrooms. A standard of temperature is laid down for light work of a sedentary character, and power is given to the Secretary of State to prescribe standards of temperature and to prohibit the use of unsuitable methods of heating. The most important new proposals included in Part I. (Health) of the Bill are those for securing in every factory sufficient and suitable lighting—an entirely new requirement which should be productive of much good. Again, power to require reasonable arrangements to be made for the medical supervision of the workers in certain circumstances—as, for example, in cases of outbreaks of disease in particular factories—is also an entirely new proposal contained in this part of the Bill.

The new legislation will extend the responsibilities of Local Authorities, but no great radical change is proposed. Should the proposed new code pass into law, something will certainly have been done to remove the reproach that has rested upon Parliament that we are still in the main dependent upon a factory code drawn up a generation ago. It would also greatly improve the conditions which the law laid down for the purpose of compelling the more backward or unwilling of employers to observe, and apply standards which were willingly and voluntarily accepted and applied by the

best employers, and would improve the conditions of work in the daily life of those who form the great industrial population.

General Improvements.—It is satisfactory to report that progress has continued to be made during the year in regard to sanitary conditions, and that the standard of cleanliness in workshop premises has been well maintained. Yet there is no ground for complacency, and efforts towards constant and steady improvement are always to the fore and regular supervision and inspection necessary.

Although the statistical information to this part of the Report gives a survey of the work covered in the course of the year, it may be well to amplify to some extent the figures given. This may be conveniently summarised in the undernoted form, the work embracing the re-building afresh and modernising of sanitary accomodation, structural repairs and improvements, and the provision of sanitary and other equipment, etc.

Sanitary Accommodation introduced	8
Sanitary Accommodation (dry pail privies abolished—water closets introduced)	3
Additional Sanitary Conveniences installed on account of insufficiency of these in regard to number of workers employed	5
Access to Sanitary Accommodation arranged	1
Separate sanitary accommodation for sexes provided	10
Separate sanitary accommodation—access to conveniences arranged	2
Urinals installed	3
Intervening ventilated space between convenience and workroom provided	32
Intervening spaces ventilated to external air	6
Water-closets replaced by modern apparatus	6
Water-closets removed (in disuse or communicating direct with workshops)	2
Water-closets removed to more sanitary situation—new apartments constructed	5
W.C. apartments—ventilation provided or improved	10
Artificial lighting (electric) introduced for W.C. apartments	9
Repairs to W.C. apparatus or structural repairs effected to apartments	37
Sinks and wash-hand basins introduced	7
Sinks substituted by modern appliances	3
Sinks provided in more sanitary situation, or removed, or repaired	8
Provision of "Main" water supply	5
Hot water systems introduced, or pipe-work renewed or repairs made	6
Roofs, walls, ceilings, floors, ventilators, windows, courtyards, etc.—general repairs or improvements effected	28

Bakehouses.—With regard to bakehouses there is a gradual but marked decline in the use of underground premises. Three such bakehouses were closed during 1936. At the end of 1904 there were 134 certified underground bakehouses in Edinburgh. By 1920 they had been reduced to 86, and in 1932 they numbered 64. At the close of 1936 the number stood at 57. Many causes have led to the closing of underground bakehouses. The main reasons are retirement of the small master baker, the merging of smaller businesses into larger firms, the competition of larger firms, and the centralisation of baking in well-equipped factories provided with modern baking appliances. In a few instances bakehouses have been closed owing to the premises having been acquired and converted into use for other purposes. The competition of new hygienic bakeries has also led to a general improvement in the older premises, though examples are still plentiful of failure to clean furniture and appliances, to remove dirt from floors under machines, and the like. It may be added that the structural disadvantages of these premises tend to make it difficult to maintain the same high standard of cleanliness as that found in premises of more modern and recent construction.

SANITARY DEPARTMENT,
PUBLIC HEALTH CHAMBERS,
JOHNSTON TERRACE,

EDINBURGH, *May, 1937.*

To

*The Department of Health for Scotland and
The Right Honourable the Lord Provost,
Magistrates and Council of the City of Edinburgh.*

MY LORD PROVOST, LADIES AND GENTLEMEN,

I have the honour to present the Annual Report of the Sanitary Department of the City of Edinburgh for the year 1936.

HOUSING.

Despite the many difficulties which had to be faced by the Local Authority regarding the re-housing of tenants from Slum Clearance Schemes, considerable progress was made during the year. Since 1923 the Local Authority have dealt with 6,313 insanitary houses affecting a population of 21,077.

Housing (Scotland) Acts, 1919-1935.—The Improvement Schemes promoted by the Local Authority prior to the passing of the Housing (Scotland) Acts, 1930 and 1935, are rapidly nearing completion. Many of the new houses erected on the sites of the old insanitary properties are now in occupation. The improvement effected in these areas is truly remarkable, and the Local Authority have good cause to be pleased with the results. The tenements are substantially built with stone fronts of very pleasing appearance. The new houses in Gifford Park and Bernard Terrace—St. Leonard's Street, are worthy of particular note and are a marked transformation from the former drab conditions.

The following tables show what has been done under the various Acts :—

Housing (Scotland) Acts, 1919-1925—

<i>Improvement Scheme.</i>	<i>No. of Houses dealt with.</i>	<i>Population.</i>
Cowgate-Grassmarket, 1923	630	1,429
Leith, 1924	678	2,444
Canongate-Corstorphine, 1927	293	556
St. Leonard's (1st Section), 1927	752	2,619
St. Leonard's (2nd Section), 1929-30	1,544	5,375
Totals	3,897	12,423
Closing Orders	272	979
Grand Totals	4,169	13,402

Housing (Scotland) Act, 1930—

<i>Clearance Area.</i>	<i>No. of Houses dealt with.</i>	<i>Population.</i>
Ann Terrace, etc., 1934	87	301
Trafalgar Lane, Leith, 1934	152	571
Maryfield, etc., Portobello, 1935	78	253
New and Old Broughton, etc., 1935	108	225
Couper Street, etc., Leith, 1936	327	1,186
Abbeyhill (1st Section), 1936	49	168
Albert Cottages, etc., 1936	41	200
Canongate (Duncan's Close, etc.), 1936	37	121
Abbeyhill (2nd Section), 1936	8	24
Totals	887	3,049
Demolition and Closing Orders	1,257	4,626
Grand Totals	2,144	7,675

Clearance Areas.—During the year, five Clearance Areas were dealt with. These, with the exception of Couper Street Clearance Area, were of small dimensions, and have proved that the policy of the Corporation in dealing with smaller groups of houses facilitates the whole procedure as compared with the former method of dealing with several hundred houses at a time.

Couper Street, etc., Clearance Area.—There were two areas in this Scheme, comprising 327 houses, with a population of 1,186 persons. Objections were lodged by several owners, and, in consequence, an Inquiry was held on 28th July, 1936, by the Department of Health.

As the Local Authority propose to rebuild on part of the site, Compulsory Purchase Orders were made for Area A and Clearance Orders for Area B. The Orders for Area A were confirmed by the Department of Health on 8th February, 1937, with only one slight modification, and the Orders for Area B were confirmed without modification on 13th November, 1936.

The tenants from the houses in these Areas are being re-housed at Granton.

Many of the tenements in the Area suffered from over-subdivision resulting in dark common lobbies, back-to-back houses and insufficient water-closet accommodation. A disquieting feature was the number of houses which were bug-infested, fully 90 per cent. of the houses being in this condition. This district has always been considered one of the black spots in Leith, and the demolition of the buildings and erection of new tenements on part of the site will be a decided improvement.

Abbeyhill (First Section) Clearance Area.—There were two areas in this Scheme, comprising 49 houses, with a population of 168 persons.

No objections were lodged in this Scheme, and Clearance Orders were made on 9th September, 1936.



CLEARANCE AREA—COUPER STREET (Looking South-East).



CLEARANCE AREA—EAST CROMWELL STREET.



TYPES OF BUILDINGS IN COUPER STREET CLEARANCE AREA

Albert Cottages, etc., Clearance Area.—This Area comprised 41 hutments, which were erected as a temporary expedient to alleviate housing conditions immediately after the War. The tenants have all been removed, the huts demolished, and new stone-fronted tenements erected on the site.

Duncan's Close, etc., Clearance Area.—This was a small Area comprising 37 houses and affecting a population of 121 persons. The tenements formed a very congested site, with narrow closes and poorly-lit apartments in the houses. A Clearance Resolution was passed on 21st July, 1936, and as the Local Authority had acquired the subjects, no Orders were necessary.

Abbeyhill (Second Section) Clearance Area.—This was a very small Area of 8 houses affecting a population of 24 persons. It forms part of what is known as the "Island" site at Abbey Strand, and is adjacent to "Queen Mary's Bath."

A Clearance Resolution was passed by the Local Authority, on 24th September, 1936, and, as the property had been acquired by the Corporation, no Orders were necessary.

Individual Unfit Houses.—In addition to the houses in Clearance Areas, 135 houses throughout the City were dealt with either by means of Demolition Orders or Closing Orders.

The number of houses dealt with in this manner was less than that for the last two or three years, and this was accounted for by the slowing up of re-housing operations due to circumstances over which the Local Authority had little or no control.

These individual houses were for the most part situated on the lower flats of tenements which were not insanitary as a whole, and suffered mainly from poor lighting and dampness.

The returns submitted to the Department of Health are contained in the appendices at the end of the Report.

Bug-Infestation of Houses.—The scheme adopted by the Local Authority, in 1934, to prevent the transference of bug-infested furniture to the new houses is proving very satisfactory. During the year, the houses and household effects of 1,459 prospective Corporation tenants were examined by the Inspectors of this Department, and 307 or 21 per cent. of that number were found to be bug-infested. Since the scheme was put into operation, 5,072 houses have been inspected, of which 1,081 or 21 per cent. have been found bug-infested.

The furniture from these houses was removed in special pantechnicons to the fumigation chamber at Powderhall and there subjected to hydrocyanic acid gas. The total number of fumigations carried out during the year at Powderhall was 307, and the total number since 1934 was 1,068. After fumigation, the articles were thoroughly aired before delivery to the new houses. It was not considered advisable to subject bedding and bed-clothes to this method of fumigation, and these were accordingly taken to the City Disinfecting Station, where they were treated in the steam disinfector. Altogether, 721 sets of beds were dealt with.

A considerable amount of unwanted furniture, such as bedsteads, mattresses, chairs, pictures, etc., were destroyed, with the tenants' permission. Previous to destruction, these articles were treated along with the other furniture in the Fumigation Chamber, and it is agreed that, by adopting this method, the possibility of fresh infestations in other houses by the purchase of second-hand articles is obviated.

One aspect of the bug problem which is causing much concern to many local authorities is the transference of bugs by the sale of wood and other materials from slum properties which are demolished under the Housing Acts. Section 73 of the Housing (Scotland) Act, 1935, gives a local authority power to disinfest a building prior to demolition, but the difficulties in large tenemental properties are formidable. The Corporation, however, decided as an experiment to deal with a badly-infested tenement in the Couper Street Area, and, after the work is completed, a special report on the subject will be submitted to the Public Health Committee.

Supervision of Re-Housing Areas.—With a view to having the houses in the re-housing areas kept clean and in proper order, and also to prevent overcrowding and sub-letting, their regular visitation by Sanitary Inspectresses was continued with most gratifying results.

Close contact is made with the housewives, and, by sympathy and understanding, they and their families are encouraged to adopt careful and cleanly habits. During the year, 16,972 visits were made, and these revealed that 88·7 per cent. were kept in a clean condition, 10·2 per cent. fair, and 1·1 per cent. dirty. Of the latter number, it is estimated that a very small proportion could be regarded as incorrigibles; the figure might be stated as 0·28 per cent.

"Ticketed" Houses.—In addition to the inspections of the re-housing areas, visits were made regularly by the Sanitary Inspectresses to "ticketed" houses within the City, and to "non-ticketed" houses in close proximity thereto. Altogether, 5,816 visits were made during the year.

Housing Repairs and Improvements.—No notices were served under Section 14 of the Housing (Scotland) Act, 1930, as the difficulties associated with many properties would necessitate the provision of alternative accommodation for the tenants, and, as mentioned in previous reports, it is doubtful if much can be done in this direction until Local Authorities are empowered to provide accommodation with the assistance of a Government Grant. It was possible, however, to have many minor repairs carried out in houses by the owners at the request of the Department.

Rural Housing Improvements.—Under the Housing (Rural Workers') Acts, 1926 and 1931, applications for financial grants were made during the year by the owners of 7 farm and other rural cottages. All were granted and improvements were proceeded with immediately, including the provision of bathrooms, sculleries, drainage, improved lighting, and repairs to floors, walls, roofs, etc. Since the passing of these Acts, 207 houses have been improved with the aid of the grant.

Farm workers' houses in the suburban areas were visited by the sanitary inspectresses in order to ascertain the state of cleanliness in the dwellings. The conditions were usually found to be satisfactory and, in the few instances which were not up to standard, re-visits showed a marked improvement.

Increase of Rent, Etc., Acts.—Three applications were received from tenants of houses for certificates in terms of the Rent and Mortgage (Restrictions) Acts, 1920-33, that the houses were not in all respects in a reasonable state of repair. In two instances the defects complained of were not sufficient to warrant the granting of a certificate. In the other instance the certificate was granted, and, on the tenant obtaining other accommodation, the owner gave a voluntary undertaking that the house would not be re-let for human habitation.

Overcrowding.—During the year 284 cases of overcrowding were abated. Of this number 59 were in one-apartment houses, 212 in two-apartment houses, 10 in three-apartment houses, 2 in four-apartment houses, and 1 in a five-apartment house. The discontinuance of sub-letting or removal of lodgers abated overcrowding in 16 instances.

This does not represent the total abatement of overcrowding in the City as accurate information is not possible without a re-survey of all overcrowded houses. The recorded number, therefore, as shown in Appendix 2 of the Report, represents the abatement of cases of overcrowding reported to this Department. On visiting the houses vacated by 268 overcrowded families, it was found that 38 had been re-overcrowded by the incoming tenants, 20 in one-apartment houses, 14 in two-apartment houses and 4 in three-apartment houses.

Recommendations were made to the House-letting Department in 1,198 instances where overcrowding was serious. A considerable number of tenants in overcrowded houses were provided with new Corporation houses as a result of these recommendations.

GENERAL SANITATION.

Nuisances and Sanitary Improvements.—During the year the total number of structural defects and nuisances dealt with was 8,543. Of this number 2,432 were intimated by citizens, 193 by other departments, and 5,918 were discovered and reported by the District Sanitary Inspectors. These nuisances involved the service of 8,627 notices for their removal.

Water-closets introduced and substituted for old appliances totalled 46, whilst 114 were improved or repaired. Sinks introduced, substituted and insanitary appliances abolished totalled 122. Drains cleared, repaired or renewed, including soil, sink, waste and rain water pipes, totalled 365. Improvements effected in connection with sanitary appliances and drains totalled, in all, 862. Attention was also paid to the storage of water in cisterns, repairs to water pipes and the protection of water against contamination in 708 cases. Repairs to houses were effected in 287 cases, mostly in connection with floors, hearths, doors, walls, windows, grates, coal bunkers and plaster work, whilst nuisances removed in houses numbered 1,073 respecting obnoxious smells, smoke nuisances, dampness, overcrowding, dirty houses and the keeping of animals.

Complaints dealt with in respect of dirty stairs and passages, including the insanitary condition of walls of common staircases, totalled 2,084. In all, 1,099 common staircases were repainted. Other nuisances dealt with totalled 3,529. These included the presence of rats and other vermin in houses, casting of garbage from windows, removal of accumulations of garbage and manure, cleaning of dirty cellars and noise nuisances.

Nuisances Arising from Dry-Cleaning Plants.—Several complaints were received during the year of nuisance arising from premises in which the process of “Dry-Cleaning” was carried on.

These premises were situated on the street flat of tenemental properties in the central districts of the City, the upper flats being occupied as dwelling houses or business premises. The occupiers of the flats above complained of the serious nuisance caused by noxious fumes pervading their premises, and it was alleged that the fumes affected the eyes of the inmates and caused sickness and headaches. In one case complaint was also made of noise and vibration caused by machinery.

On inspection it was found that the premises in which the “Dry-Cleaning” was carried on were shops which had been converted for this purpose. The main cleaning unit was situated in a glass cabinet formed in one of the shop windows. The solvent used in the cleaning process was trichlorethylene, and it was found that the fumes arising from the process were being drawn off from the cleaning unit by means of a fan into a metal tube or duct and partly condensed, but most of the exhaust fumes were being discharged from the duct direct into an ordinary tenement vent. The fumes appeared to be escaping from this vent into the other flues in the stalk and thence into the houses and premises on the flats above. The flue from the steam boiler was also connected to the tenement vent, causing overheating of the walls in the premises above.

The attention of the cleaning firms was called to the nuisance and solvent recovery plants were installed by means of which the exhaust gas from the cleaning unit was passed through carbon filters whereby a very high percentage of the solvent was recovered for re-use in the cleaning unit. The installation of these recovery plants has, therefore, not only done much towards the abatement of nuisance caused by fumes, but has also proved to be very economical to the cleaning firms concerned. In one case a separate brick-built vent was carried up the rear wall of the tenement to above the level of the roof and the boiler flue was disconnected from the tenement vent and led into the new vent.

The operation of the plants, however, requires very careful attention and nuisance is liable to arise from laxity or carelessness on the part of the attendants.

It would appear to be most essential, therefore, that power should be obtained so that the consent of the Corporation would be required before such “Dry-Cleaning” plants could be installed and that satisfactory measures would be taken to prevent any nuisance arising from the escape of fumes or other causes.

Health and Hygiene Exhibition.—From 18th March to 4th April, 1936, the Department took an active part in the Third Health and Hygiene Exhibition held by the Corporation in the Waverley Market. The work of the Department was classified under seven sections dealing with Housing, Nuisances, Smoke Prevention, Food and Drugs Adulteration, Vermin Repression, Port Sanitation and Shops Act Administration. The activities of the Department were demonstrated by no less than 186 exhibits. These included cinema films, models of smoke prevention apparatus, samples of adulterated food-stuffs, specimens of rats and live vermin, photographs and charts of slum clearance, models of ships, and plague-preventing measures. Great interest was evinced by the public in all sections.

Sub-Letting of Houses.—The sub-letting of houses to several families is a practice with which the Department had to deal on many occasions due to overcrowding and the lack of adequate sanitary conveniences. The prevalence of the practice, which is a contravention of the Edinburgh Corporation Order, 1926, can be definitely attributed to the lack of houses in the City. The City Engineer has powers to deal with this matter, and sixteen cases were brought to his notice during the year.

Sanitary Conveniences for Houses.—With the object of increasing the provision of water-closets and indoor water supply for existing houses, a circular was issued by the Department of Health in 1925 urging that a survey should be undertaken and that thereafter full use should be made of statutory powers to require provision, where practicable, of sufficient sanitary conveniences.

At that time the survey revealed that there were 19,276 houses in the City without a separate water-closet for their own use, that 3,306 houses were without a separate sink, that 936 houses had neither the provision of water nor sink within the house nor had they the use of a common sink, that 514 houses had not the use of a water-closet but were served by dry-closets or privy middens, and that ashpits were still in existence for 228 houses. During the year the reduction in the number of sanitary conveniences used in common was as follows:—73 water-closets, 8 sinks, 74 houses without sinks or water supply within the house and without the use of a common sink, 5 dry-closets and 2 ashpits. These reductions were mainly due to the progress made in the clearance of slum areas.

The position now, as shown by the table in Appendix 4, is that since 1925 the number of water-closets used in common has been reduced by 1,566 or 21 per cent., the number of sinks used in common by 388 or 36 per cent., the number of houses without sinks or water supply within the house and without the use of a common sink by 612 or 65 per cent., the number of dry-closets by 126 or 79 per cent., the number of ashpits used in common by 43 or 74 per cent., and that all the privy middens have been abolished.

Places of Public Entertainment.—The theatres, picture houses and other places of public entertainment were visited frequently by the District Inspectors to see that they were kept in a reasonably hygienic condition. It was found generally that satisfactory attention was being paid to cleanliness and other matters and that the need for ventilation of buildings was being observed. In the majority of cases the atmospheric conditions were found to be satisfactory.

Offensive Trades.—The offensive trades registered within the City comprised 3 tanners, 8 hide and skin factors, 1 gut scraper, 1 glue and size maker, 2 skinners, 1 soap boiler, 2 tripe cleaners, 6 manure manufacturers and 2 tallow melters, making a total of 26. Inspections showed that the provisions of the Bye-laws requiring the prevention of offensive effluvia, the inoffensive disposal of obnoxious waste, the lime-washing of walls, the cleansing of floors, utensils, etc., and the thorough flushing of the drains were being observed.

VERMIN REPRESSION.

Rat Destruction.—In all 424 premises were dealt with for infestation by rats or other vermin. Of these premises 410 had been cleared of vermin by the end of the year. In one case several complaints were received of rats invading a new housing area on the north side of the City. A farm steading in the district had been vacated and it was found, on inspection, to have been seriously infested. The rodents had evidently been forced to raid the gardens of the neighbouring houses in their search for food. Measures were immediately taken to deal with the nuisance at the farm. The scarcity of food provided an excellent opportunity for the laying of poisoned food baits and, in all, 1,500 poisoned bread baits were used. In addition, rat runs were gassed. These measures were sufficient to cope with the nuisance. Finally, the farm steading was demolished for feuing purposes.

Rat Week.—As in the previous years, the Local Authority co-operated with the Department of Agriculture in an intensive campaign for rat destruction during Rat Week, and very satisfactory results were obtained.

Publicity was given the matter by issuing explanatory leaflets to owners and occupiers of factories, warehouses, farms, etc., likely to be infested, and by advertisement in the local newspapers. The co-operation of the Leith Dock Commissioners, Railway Companies, the owners of shipbuilding yards and the various City Departments was also secured.

Although regularly engaged in rat extermination, the majority of those concerned undertook special efforts during the week to destroy the vermin, the means adopted including trapping, poisoning, gassing and organised hunts. Gassing operations were carried out and about 21,650 baits laid down on the banks of streams, etc., by the staff of this Department.

Vermin Other than Rats.—The residents of several bungalows in the vicinity of Craighleith had occasion to complain of the depredations caused by rabbits raiding their gardens. The adjacent quarry was found to be the source of the pest and the burrows were gassed with cyanide. No further complaints were received after these gassing operations were carried out.

In a densely-populated area of the City, dwelling-houses in a tenemental property were seriously infested by small flies. The Factor of the property sought the help of the Department to investigate the source of the nuisance and, on investigation of the

basement cellars in the property, it was found that sludge matter had accumulated from a drain which had evidently been leaking for a long period. This had caused the generation of a swarm of insects identified as the owl midge. The entire basement premises were opened up and the walls liberally sprayed with carbolic solution, after which the premises were cleaned out, the drain repaired, and clean dry engine ashes put down.

The Department were also asked on several occasions in the summer to destroy wasps' bikes and hives of bees which were a source of nuisance and danger to the public. In one case a wasps' bike was situated in the shed of a public school and caused much concern amongst the pupils until it was destroyed by gas.

Verminous Children, Bedding, Etc.—During the year, 443 instances of verminous children were notified by the Education Committee, and in connection therewith 363 children were bathed and 604 sets of clothing and 33 beds disinfested.

LODGING HOUSES.

Common-Lodging Houses.—There was no change in the number of common lodging-houses which, at the end of the year, was 15, with accommodation for 1,966 persons, as follows :—

Ward.	Address.	Accommodation.	
		Males.	Females.
EDINBURGH—			
14	65 Grassmarket	85	...
14	75 Grassmarket	337	...
14	89 Grassmarket	110	...
12	3 Guthrie Street	331	...
12	1 Pleasance	213	...
12	85 West Port	78	...
14	32 West Port	38	...
12	17 James Court . . . . .	...	34
12	1 Merchant Street (Margaret Tudor) . . . . .	...	43
12	3 Merchant Street . . . . .	...	80
14	5 and 7 Vennel . . . . .	...	118
LEITH—			
18	10 Burgess Street	81	...
18	5 Parliament Street	180	...
18	57 Tolbooth Wynd	127	...
18	2 Waters Close	111	...
Totals . . .		1,691	275

Farmed-Out Houses.—The number of farmed-out houses on the register is similar to last year, namely, 33, with accommodation for 111 persons.

Ward.	Address.	No. of Houses.	No. of Occupants.
12	18 Blackfriars Street	14	46
14	112 West Port, (Left Stair)	10	35
14	112 West Port (Right Stair)	9	30
Totals . . .		33	111

Houses-Let-in-Lodgings.—The number of houses-let-in-lodgings on the register is 7, with accommodation for 384 persons.

Ward.	Address.	No. of Houses.	No. of Occupants.
12	1 and 3 Blair Street	1	114
10	38 Broughton Street	1	23
13	72 Grove Street	1	164
11	2 Leith Street Terrace	1	15
11	5 Leith Street Terrace	1	15
11	12 Leith Street Terrace	1	37
14	31 Clerk Street	1	16
Totals		7	384

Inspections carried out by day and night showed that these houses were being conducted in accordance with the provisions of the respective bye-laws.

Accommodation for Seasonal Workers.—During the year, 192 seasonal workers were employed on 9 farms situated in the suburban districts, and visits were paid both before and during occupation of the special accommodation provided in order to see that the Bye-laws were being observed. These provided for separate sleeping apartments for each sex, the prevention of overcrowding, the proper lighting and ventilation of the accommodation, the provision of water, adequate sanitary conveniences, ablution facilities, etc. Inspection showed that the various premises were kept in a clean and sanitary condition.

SMOKE ABATEMENT.

Measure of Atmospheric Pollution.—The Department continued to co-operate with the Atmospheric Pollution Research Committee of the Department of Scientific and Industrial Research in its efforts to investigate the pollution of the atmosphere throughout the country. In order to determine the extent of atmospheric pollution in Edinburgh, soot-collecting gauges are placed at three points, viz., Leith Links, Bruntsfield House and St. Andrew Square, and for the purpose of comparing the atmospheric conditions within the City with those outside, an additional gauge has now been placed at Glencorse Reservoir.

During 1936 the fall of impurities as indicated by the three gauges within the City amounted to an average monthly deposit of 18·30 tons per square mile, whilst for the gauge at Glencorse, which has now been in operation for nine months—April to December—the average monthly deposit was 7·87 tons per square mile. It is of interest to note from particulars of the analysis that, whilst in each of the gauges within the City, the proportion of insoluble matters, represented by tar, dust, ash and grit was greater than the soluble matter consisting of carbon dioxide, sulphates, chlorine, ammonia, etc., the position was reversed in the case of the gauge at Glencorse. As this gauge is situated in an isolated position between 3 and 4 miles from the nearest built-up area in the City, the results obtained reveal the extent to which the atmosphere is affected by smoke drifting with the wind.

Appendix 5 shows the monthly records of deposits at Leith Links, Bruntsfield House, St. Andrew Square and Glencorse Reservoir.

Smoke from Factories and Workshops.—Daily observation was made of the chimneys of the factories and workshops throughout the City by the Smoke Abatement Inspector, and when the smoke emitted was found to be excessive the attention of the parties responsible was called to the matter.

A number of notable improvements were effected on boiler house plants during the year. A common cause of excessive smoke is the forcing of the furnaces of boilers which are overloaded. In three such cases which had given cause for complaint the substitution of larger boilers overcame the trouble.

In other cases the method of stoking the fires is faulty and in this connection it is gratifying to note the continued development of mechanical stoking of both steam and central heating boilers. In a large hotel in Princes Street, for example, hand-stoked steam and central heating boilers have been replaced by two mechanically-stoked steam boilers, which produce little or no smoke. At a large Institution in a residential area of the City, mechanically-stoked boilers have replaced the former hand-stoked plant, thereby terminating a smoke nuisance which had been the subject of repeated complaints.

After corresponding with the owners of a large mill in the Leith area regarding excessive emissions of smoke from their chimney, a special type of smoke-preventing furnace was installed which resulted in a very considerable improvement. Experiments are in progress at a large factory bakery where, in order to overcome what has hitherto been a very difficult smoke problem, mechanical stokers of a special type are being applied to the oven furnaces. In order also to prevent smoke nuisance, the Corporation have in view the installation of new mechanically-stoked steam plant at Colinton Hospital to replace the existing hand-stoked boilers.

Public Complaints.—During the year 107 complaints from citizens were investigated. These referred mainly to chimneys of workshops, business premises, garages, laundries, churches, etc., and it was found possible by heightening chimneys, substituting coke or other smokeless fuel, or by altering the method of stoking, satisfactorily to adjust matters.

Smoke from Railways.—The pollution of the atmosphere by smoke from railway engines particularly as they pass through the centre of the City has been frequently referred to. As Edinburgh is a railway centre of some importance, the contribution of smoke from this cause is considerable, and the position in the centre of the City is somewhat aggravated by the fact that the railway routes are situated at a low level.

With a view to preventing, as far as possible, unnecessary discharges of smoke, the Smoke Abatement Inspector keeps a close observation upon the engines at the centrally situated stations and the depots where engines are housed and repaired, and offences are immediately brought to the notice of the railway officials. While this

does much to lessen the defilement of the atmosphere, it would appear that so long as the present method of motive power is employed, the railways will continue to be serious contributors to the smoke problem.

Steam Road Wagons.—There are only a few of those now operating within the City and from observations made it was found that care was being exercised to prevent the discharge of smoke.

Inspections and Improvements.

Inspection of boiler and other furnaces	328
Observations of chimneys extending to one hour	420
Visits to railway stations and depots	82
Complaints from citizens investigated	107
Intimation by letters, notices or verbal warning regarding excessive smoke	54
New steam boilers installed, including replacement of old boilers	15
Steam boiler replaced by electric power	1
Secondary-air smoke-preventing apparatus fitted to steam boiler furnaces	2
Mechanical stokers fitted to steam boiler furnaces	8
New chimneys erected or existing ones heightened to increase draught	10
Furnaces in which coke, anthracite or non-bituminous fuel has been substituted for coal	15
Mechanical stokers fitted to central heating boilers (this includes institutions, business premises, offices, hotels, hospitals and private dwellings)	33

Domestic Smoke.—Although no improvement of a revolutionary character, such as might be effected by the change over from the use of raw coal to smokeless fuel, can yet be recorded in respect of the smoke from domestic chimneys which is held to be the most serious contribution to the problem, yet a gradual improvement has to be acknowledged, achieved mainly by the increasing use of both gas and electricity for heating and cooking. But for this increased use, the additional smoke from the vast development of housing in the suburban areas of the City would have been infinitely greater. The increase in the use of gas and electricity is shown by the following particulars supplied by the Managers of the respective Departments.

Gas.—

	<i>Cookers.</i>	<i>Fires and Radiators.</i>	<i>Water Heaters.</i>
Increase in number of appliances fitted during 1936 compared with 1935	4,871	2,600	460
Increase per cent.	7·7	9·2	13·0
Increase in gas consumption	5·68 per cent.		
In reconstructed houses gas hotplates are fitted.			

Electricity.—The increase in the number of units of electricity supplied by the Corporation Electricity Department for domestic heating and cooking for the year ending 28th May, 1936, as compared with the same period the previous year was 31·93 per cent.

Some idea of the total number of units used for domestic purposes may be understood from the fact that the total was greater than that required for the whole tramway system.

In most houses there is at least one grate in which coal is burned, and as long as this is the case the domestic smoke problem will remain unsolved. There are, however, at least two types of specially prepared smokeless fuels available in the City, and, notwithstanding their somewhat high price, these have a very good sale. Unfortunately these fuels are only obtainable from England and railway transport charges add considerably to their selling price. The establishment of a plant to produce fuel of this type in Scotland, at a reasonable price, is a prime necessity if the burning of raw coal in domestic grates is to be avoided.

SHOPS ACTS, 1912-1934.

The administration of the Shops Acts is a matter of difficulty, as many of the provisions are so vague and general in their terms that they are capable of different interpretations. Decisions given in the Courts have not helped to clarify matters, as not infrequently the findings have added confusion to an already difficult situation. Nor is this state of affairs improved by the addition to the General Acts of numerous Closing Orders and Half-holiday Orders made by the Local Authority at the request of shop-keepers carrying on different trades or businesses. Indeed there is a complete lack of uniformity as regards hours of closing, half-holiday closing, and other such matters, and, were it possible to effect some measure of consistency, the position would be considerably simplified.

Public Holidays.—The special provisions relating to the suspension of the weekly half-holiday for assistants and to the closing of shops for the half day on the occasion of public holidays raise many points of doubt amongst shopkeepers. At the Christmas and New Year Season especially, innumerable enquiries and requests for guidance reach this office regarding the interpretation of the provisions governing these matters.

Section 4, Sub-section 5, of the Shops Act, 1912, reads as follows :—"Where a shop is closed during the whole day on the occasion of a bank holiday, and that day is not the day fixed for the weekly half-holiday, it shall be lawful for the occupier of the shop to keep the shop open for the serving of customers after the hour at which it is required under this section to be closed either on the half-holiday immediately preceding, or on the half-holiday immediately succeeding, the bank holiday."

This problem appears to be peculiar to Scotland and is mainly due to the fact that the two holidays fall on successive weeks. As the day of the week on which these holidays fall varies from year to year, so does the application of these provisions. The result is that a hard and fast ruling applicable to every year cannot be given and the circumstances have to be reviewed on each occasion. Some of the Local Orders, too, have special provisions relating to this period of the year, but they apply only to certain trades.

Young persons.—The close of the year 1936 marked the expiration of the transitional period in force since the passing of the 1934 Act whereby the normal maximum working hours were reduced from 52 to 48 hours per week for persons under 18 years of age employed about the business of wholesale or retail shops. This change entailed a certain amount of reorganisation of staffs, and some employers effected the reduction in hours by fixing the starting time each day at a later hour than formerly. In other instances, the necessary reduction of hours has been met by a cut in working hours, both morning and evening.

It has been contended by those who are interested in the welfare of young persons that it would have been of greater benefit to these juveniles if the reduction of hours had been made wholly at the end of the day. The view is held that greater opportunities would thus be afforded them for attending evening classes and for recreation.

That this improvement in the working conditions of young persons is not an unmixed blessing is borne out by the fact that in some shops the hours of employment of adult assistants have been extended so as to offset the reduced working week of young persons. It has also to be noted that, although the maximum working hours per week have been reduced, overtime of 24 hours per year permitted for young persons during the transitional period has now been increased to 50 hours per year.

Arrangements for Health and Comfort.—The foregoing remarks refer mainly to conditions appertaining to trading and employment, but there is another sphere of activity which also presents many problems, namely, those relating to the actual premises. For instance, Section 10 of the Shops Act, 1934, which relates to the arrangements for health and comfort of shop workers, contains provisions which require suitable and sufficient ventilation, temperature, sanitary conveniences, lighting, washing facilities, and facilities for taking meals to be provided in each shop. The term “ ‘ suitable and sufficient ’ means, in relation to any shop or part of a shop, suitable and sufficient having regard to the circumstances and conditions affecting that shop or part.” The words “ suitable and sufficient,” however, are of such a general character that, without any official guidance or standard, the application of the Section becomes a matter of difficulty.

Nevertheless, during the year, considerable improvement has been made in the conditions affecting the health and comfort of assistants in many shops including, in some cases, very substantial structural alterations.

Opportunity is taken when plans of new shops and of alterations on existing shops are submitted to the Dean of Guild Court to call the attention of the shop owners or their architects to the various requirements of Section 10 (Health and Comfort Arrangements) of the Shops Act, 1934. Some of these requirements are outwith the scope of the Dean of Guild Court and would otherwise be lost sight of at the time. Many improvements have thus been effected which would have necessitated alterations at a later date.

Statistics.—Shop inspections totalled 7,244. The number of visits in the evenings was 177, on Saturday afternoons 28 and on Sunday 1. Irregularities in

connection with hours of employment, overtime, etc., of young persons totalled 48, whilst those in connection with weekly half-holidays for assistants, the affixing of prescribed notices, forms, etc., in shops, the keeping of records and the observance of weekly half-holidays and evening closing hours totalled 3,105. Shop improvements effected under health and comfort provisions including cleanliness and other matters totalled 954. The number of intimations, notices and letters sent in connection with the foregoing matters was 481. It was necessary to prosecute in 28 instances, and in each case there was a conviction. The fines imposed amounted to £17 15s.

A detailed statement in connection with the administration of the Shops Acts is contained in Appendix 6.

FOOD PREMISES.

Foodshops, Restaurants, etc.—In the inspection of these establishments attention is directed, among other matters, to the necessity of taking every precaution in the protection of foodstuffs against contamination. It is no doubt essential and vital for business reasons to expose goods for sale to public view, but, in the matter of foodstuffs, their exposure to dust and other impurities in the atmosphere—not to mention the risk of more revolting contamination—by being placed unprotected outside shops in boxes on the pavement level is a rather common and insanitary practice.

Protection in the exposure of certain foodstuffs within shops is recognised by enlightened shopkeepers as a necessary hygienic and essentially sound business practice, and many of the larger stores make use, among other methods, of attractive glass show-cases which, from a sanitary point of view, are very effective.

Ice-Cream Shops.—At the end of the year there were 612 premises registreed for the sale of ice-cream, and 616 persons registered for carrying on the business of manufacturer or vendor of or dealer in ice-cream. A close supervision of these premises was carried out to maintain a high standard of sanitation.

Milk Supply.—The number of registered dairy-keepers, including hawkers, at 1st January, 1936, was 646. Applications for registration were received during the year in respect of 17 premises and 1 hawker. Eleven of the premises were fully registered, 6 were registered for the sale of bottled milk only, and the hawker was provisionally registered for the sale of bottled milk from a vehicle. In addition, applications for registration from 4 dealers to sell sterilised milk in sealed bottles were provisionally granted. Certificates of registration were cancelled for 5 dairies, the sale of milk having been discontinued. The total number of persons registered at the end of the year was 663.

The total approximate daily supply of milk of all classes was 28,320 gallons, which is an increase of 970 gallons or 3·5 per cent. when compared with last year. Of the total City milk supply 23,900 gallons or 84 per cent. was sold in bottles. The balance of 4,420 gallons or 16 per cent. was largely milk supplied in bulk to hotels, institutions, etc., only 6 per cent. actually reaching the public other than in bottles.

The quantities of specially designated milks sold daily within the City were :—689 gallons of “Certified,” 2,170 gallons of “Grade A” (Tuberculin Tested), and 92 gallons of “Grade A.” In addition, 18,604 gallons of milk are “Pasteurised,” although only approximately half of this is sold under licence, making a total of 21,555 gallons or about 76 per cent. of the total daily sale of milk.

The Local Authority granted 342 licences to dealers for the sale of the various grades of milk under the Milk (Special Designations) Order (Scotland), 1930, 109 being for “Certified,” 121 for “Grade A” (Tuberculin Tested), 18 for “Grade A,” and 94 for “Pasteurised.” This is an increase of 88 over the previous year.

The Seventh Annual Progress Report of the Education Committee states that, under the national scheme for the supply of milk to school children at a reduced rate, 102 schools took part, comprising 22,665 children. An additional 1,520 children received a ration of milk free of charge on the advice of the school doctor. The total number of milk meals supplied during the year was 4,853,516, representing 200,086 gallons of milk. The milk supplied is “Grade A” (Tuberculin Tested).

SALE OF FOOD AND DRUGS ACTS, ETC.

During the year 1,585 food and drug samples, or 3·41 per 1,000 of the population, were submitted for chemical analysis. These consisted of 801 statutory or official samples and 784 informal or test samples. The statutory or official samples represented 96 different articles of food and drugs.

With regard to the statutory samples, Dr. A. Scott Dodd, B.Sc., Ph.D., F.I.C., F.C.S., F.R.S.E., City Analyst, reported 733 or 91·51 per cent. to be genuine and 68 or 8·49 per cent. as failing to comply with the legal requirements.

Milk.—Of the total number of statutory or official samples 203 were of sweet milk. In addition, 148 samples of sweet milk were procured in course of delivery for biological examination. Of the 203 statutory samples 171 were reported genuine and 32 adulterated either by the abstraction of fat or the addition of water or both. The average amount of milk fat, inclusive of adulterated samples, was 3·48 per cent. compared with the present presumptive standard of 3 per cent.

The cases of adulteration could not be termed very serious, but it was considered necessary to take legal proceedings against one producer who was fined the sum of £5.

The Milk (Special Designations) Order (Scotland), 1930.—The practice was continued of taking monthly samples of the various supplies of milk sold in the City under the above Order. During the year 219 samples of the specially designated milks were submitted for chemical analysis. The samples consisted of 94 “Certified,” 54 “Grade A” (Tuberculin Tested), 35 “Grade A” and 36 “Pasteurised” milk.

A detailed statement is given showing the number of samples of the specially designated milks taken each month in the year and the average amount of butter fat found present is also tabulated.

Date.	"Certified."		"Grade A" (T.T.).		"Grade A."		"Pasteurised."	
	No. of Samples.	Butter Fat. Per Cent.	No. of Samples.	Butter Fat. Per Cent.	No. of Samples.	Butter Fat. Per Cent.	No. of Samples.	Butter Fat. Per Cent.
January . .	8	3.95	6	3.71	3	3.70	3	3.50
February . .	8	3.87	5	3.83	3	4.16	3	3.54
March . .	8	3.77	5	3.63	3	3.70	3	3.50
April . .	8	3.70	5	3.55	3	3.11	3	3.59
May . .	8	3.97	4	3.63	3	4.07	3	3.51
June . .	8	4.00	5	3.50	3	3.80	3	3.58
July . .	8	3.85	5	3.90	3	3.89	3	3.35
August . .	6	4.15	...	...	2	4.15	2	3.74
September . .	8	4.21	5	3.82	3	3.96	3	3.78
October . .	8	3.96	4	3.87	3	4.06	2	3.86
November . .	8	4.34	5	3.92	3	3.88	4	3.87
December . .	8	4.00	5	3.92	3	4.21	4	3.82
Total . .	94	...	54	...	35	...	36	...
Average . .	...	3.98	...	3.75	...	3.89	...	3.63

The results showed that, with one exception, in the month of April, when the "Grade A" butter fat fell to 3.11 per cent., the average amount of butter fat of all grades throughout the year complied with the prescribed standards.

In addition, 26 samples of "Grade A" (Tuberculin Tested) milk, as supplied to the schools in the City, were procured for analysis, and the average butter fat content of 3.85 per cent. was well above the standard.

The Milk (Special Designations) Order (Scotland), 1930, was revoked in October and was superseded by the Milk (Special Designations) Order (Scotland), 1936. The special designations of milk authorised by the new Order are "Certified," "Tuberculin Tested," "Standard" and "Pasteurised."

Ice-Cream.—Thirty-six samples of ice-cream were purchased with a view to ascertaining the quantity of milk fat contained therein. Twenty-three of these were bought from shops and 13 from ice-cream barrows. The average amount of milk fat found in the samples taken from shops and barrows was 3.08 and 2.62 per cent. respectively. The analysis disclosed a wide divergence in the quantity of milk fat in the respective samples which ranged from as low a figure as 0.45 per cent. to as high as 9.90 per cent. of milk fat. Twenty-two of the samples taken contained less than 3 per cent. milk fat and of these 8 fell below 2 per cent.

It has been repeatedly suggested by Trade Associations that the designation "Ice-cream" should be restricted to a product containing not less than 8 per cent. of milk fat. The marked differences in the quality of these samples would appear to justify the demand for fixing a prescribed standard for ice-cream.

Mince.—Notwithstanding all the warnings that have been given and the prosecutions instituted, a number of butchers continue to add preservative to mince during the prohibited months.

The number of samples purchased from the various shopkeepers was 50, and 17 of these were found to contain preservatives contrary to the Public Health (Preservatives, etc., in Food) Regulations (Scotland). It was considered necessary to take legal action against 13 of the offenders, each of whom pled guilty, and fines were imposed amounting in all to £30 3s.

Two samples of sausage meat were purchased, but on analysis these were found not to contain sausage meat but mince, with a minute quantity of wheat starch in amount not exceeding 0·5 per cent., and no condiments were detected. These samples were found to contain Sulphur Dioxide which, in one case, amounted to 700 parts per million by weight in a month when preservative was entirely prohibited. Legal action was taken against both butchers and fines amounting to £5 were imposed.

Sausages.—Sixty-seven samples of sausages of various descriptions were purchased for chemical examination and the City Analyst reported that, with the exception of one sample, the amount of preservative present was within the limits sanctioned by the Public Health (Preservatives, etc., in Food) Regulations (Scotland), and that 28 of the samples were actually found to be entirely free from preservative.

Imported Foodstuffs.—Regular inspection was made at Leith Docks of the imported articles of food which required to be examined by the Local Authority under the Public Health (Preservatives, etc., in Food) Regulations (Scotland). Thirty samples were procured for analysis, chiefly of canned meats consigned from Canada, America and Denmark. The City Analyst reported that all the samples conformed to the Regulations.

Metallic Contamination of Canned Foodstuffs.—During the year different brands of tinned sardines were procured and submitted for analysis by the City Analyst with a view to the determination of the presence of metallic contamination.

Dr. A. Scott Dodd reported as follows :—“ All the samples of Sardines which I analysed showed very little contamination by metals. Small amounts of Iron were found in each sample and minute quantities of Copper and Zinc were also found in several of them. Only 5 of the samples contained minute traces of Lead, namely, 0·5 parts, 0·55 parts, 1 part, 10 parts and 20 parts per million, or 0·0035 grains, 0·0039 grains, 0·007 grains and 0·14 grains per lb. respectively. These quantities are actually very small and bear testimony to the care taken by the manufacturers to protect the contents of the tins from metallic contamination. It also proves that the amount of metallic contamination in tinned sardines is, in general, practically negligible, and, therefore not at all likely to have any harmful effect on the consumers.”

The Fertilisers and Feeding Stuffs Act, 1926.—Visits were made to various premises throughout the City where fertilisers and feeding stuffs were prepared for sale or consignment. Sixteen official samples were taken in the manner prescribed

in the Fertilisers and Feeding Stuffs Regulations, 1932, 15 of these being of feeding stuffs and 1 a sample of fertiliser. The Agricultural Analyst reported that not only was each sample in conformity with the statutory statement but that in several instances the percentages were exceeded in one or more of the constituents. The results, therefore, were exceedingly satisfactory.

The Rag Flock Acts, 1911 and 1928.—The premises of various bedding and rag flock manufacturers were visited and 9 samples of rag flock taken. Except in 2 cases, the analysis showed a high standard of cleanliness, the amount of chlorine found present being well below the standard which requires that rag flock should contain not more than 30 parts by weight of soluble chlorides (expressed as chlorine) in 100,000 parts of flock. The circumstances in connection with the 2 unsatisfactory samples were such that it was deemed sufficient to warn the firms concerned that any future contravention would result in legal proceedings being taken.

Whilst the results of the samples, on the whole, were very satisfactory, attention is again directed to the very limited scope of the Acts. Rag flock is the only filling material used for bedding and upholstery that must conform to a standard, yet other filling and stuffing materials sampled in the City are known to give considerably worse results, as regards cleanliness. It is particularly important, too, that second-hand filling or stuffing materials should only be permitted to be used after thorough purification or sterilization.

In the interests of public health it is desirable that all materials other than rag flock used for bedding and upholstery should conform to a definite standard of purity. It is therefore urged that the time has arrived for fixing a general standard of cleanliness for all filling materials used for this purpose and for the registration by the Local Authority of all premises where these materials are manufactured or used.

The Merchandise Marks Act, 1926.—Under the above Act and the Orders made thereunder certain imported foodstuffs require to bear an indication of their country of origin on exposure for sale.

On inspection of the various shops throughout the City it was evident that the majority of the traders were complying with the requirements of the Orders. A number of fruiterers and grocers, however, had to be cautioned in regard to the ticketing of imported raw tomatoes, and in each case a subsequent visit proved that the warning had been sufficient to prevent a repetition of the contravention.

Pharmacy and Poisons Act, 1933.—By an Order-in-Council, dated 6th June, 1935, the 1st of May, 1936, was appointed as the day on which the provisions of the Pharmacy and Poisons Act, 1933, should come into operation, along with the Poisons List and Rules made thereunder by the Home Secretary. The objects of the Act are to secure to the general public facilities for the supply of poisons for agricultural, horticultural, industrial and sanitary purposes, and at the same time to control their sale and distribution. In so far as they relate to poisons in Part II. of the Poisons List, the duties of administration and enforcement of the law relating to the sale, supply, storage and transport of poisons are placed on Local Authorities.

The granting of licences by Local Authorities to dealers in certain agricultural and horticultural poisons was first made legal by the Poisons and Pharmacy Act of 1908, and that system has now been replaced by a new system of registration with the Local Authority. It is incumbent upon a Local Authority to keep a list of persons, who, having premises in their area and not being registered pharmacists, are entitled to sell poisons included in Part II. of the Poisons List subject to the provisions of the Act. The Shopkeeper who is not an "authorised seller of poisons" (*i.e.*, a registered pharmacist) who desires to retail poisons included in Part II. of the Poisons List must make application to have his name and the address of his premises inserted in the list kept by the Local Authority of the area in which he desires to retail the poisons.

Subject to certain conditions a "listed seller" is permitted to sell the poisons in Part II. of the Poisons List, which are as follows :—

Ammonia ; arsenic sulphides ; arsenious oxide ; calcium arsenates ; calcium arsenites ; copper acetoarsenites ; copper arsenates ; copper arsenites ; lead arsenates ; potassium arsenites ; sodium arsenates ; sodium arsenites ; sodium thioarsenates ; barium carbonate ; barium silicoflouride ; formaldehyde ; hydrochloric acid (spirits of salt) ; hydrofluoric acid ; potassium fluoride ; sodium fluoride ; sodium silicoflouride ; mercuric chloride ; mercuric iodide ; organic compounds of mercury ; nicotine and its salts ; nitric acid, nitrobenzene ; phenols (carbolic acid and its homologues), in substances containing less than 60 per cent., weight in weight, of Phenols ; compounds of phenol with a metal in substances containing less than the equivalent of 60 per cent., weight in weight, of phenol ; phenylene and toluene diamines and their salts (hair dyes) ; potassium hydroxide (caustic potash) ; potassium quadroxalate (salts of lemon) ; sodium hydroxide (caustic soda) ; sulphuric acid.

The number of applications received from persons or firms desirous of being registered by the Local Authority was 387, and comprised grocers, drysalters, hairdressers, ship chandlers, ironmongers, garage proprietors, seedsmen, nurserymen and agricultural merchants.

Visits paid to the various premises showed that any contravention of the Act was not of a serious nature and was invariably due to a misunderstanding of the requirements of the Act. A warning was sufficient to have the discrepancies remedied.

PORT SANITARY INSPECTION.

Shipping Arrivals.—Vessels which arrived at Leith Docks and Granton Harbour from foreign ports numbered 1,324, representing 1,255,082 tons, whilst vessels which arrived from home ports, numbered 9,386, representing 1,707,148 tons. The total number of ships, including steamers, motor, sailing and fishing vessels, which entered the Port Sanitary District from home and foreign ports, was 10,710, with a total tonnage of 2,962,230, which was a decrease of 132 vessels and 48,534 tons when compared with last year.

Sanitation.—Regular routine inspection was carried out on board vessels which arrived in the Port Sanitary Area. Particular attention was paid to vessels from foreign ports, and those which arrived from plague-infected ports were specially examined

for evidence of rats on board. Specimens of rats secured on ship and on shore in the dock area were submitted to bacteriological examination for the detection of rodent plague—the precursor to human plague. In all, 59 rats were examined and reported negative.

Preventive measures were taken against the escape of rats from infested ships and intensive rat destructive measures carried out. In compliance with the Sanitary Convention of Paris, 1926, under which regular deratization is required of all vessels arriving from foreign ports, 23 vessels were deratized and 135 vessels granted exemption therefrom. As a result of the destructive measures employed 871 rats were killed. The world-wide application of this system of plague prevention has done much to reduce the rat population on board sea-going vessels.

The sanitary matters which came under review in course of the inspection of vessels were :—

1. The sources and purity of the water supply in the tanks, including the situation, construction and cleanliness of the receptacles.
2. The situation, construction, heating, lighting and ventilating of the crew's accommodation, including the presence of dampness and the general cleanliness and repair thereof.
3. The situation, construction, repair and cleanliness of the sanitary conveniences.
4. The storage and disposal of garbage and refuse ; and
5. The cleanliness of bilge spaces and the general cleanliness of holds, galleys, food stores, pantries, etc.

Of late years the number of motor vessels has increased and the construction of these vessels and new steamers has made great progress from a sanitary point of view. Generally, the living conditions and crews' accommodation on board these vessels are much in advance of legislative requirements. The owners and shipbuilders are to be commended upon their foresight in providing quarters and living conditions which will help to attract and encourage a higher class of seamen.

Even in the sphere of public health, the war in Spain has had its repercussions. All vessels arriving from Spanish Ports were specially examined for the presence on board of contaminated water supplies, particularly vessels taking drinking water on board from possible sources of pollution. Such water, however, gave no occasion for complaint, but it was deemed advisable to have the tanks of vessels cleaned and fresh supplies taken on board in these cases.

In carrying out the duties of the Port Sanitary Department, the boarding, inspection and revisiting of vessels involved 1,438 visits and the insanitary conditions dealt with numbered 4,251, necessitating 22 written and 242 verbal intimations, the service of 27 notices and 387 copies of regulations.

A detailed statement of the conditions dealt with is contained in Appendix 7.

Cleansing.—The Dock Commissioners continued to maintain a very high standard of cleanliness, the roads, wharves, sanitary conveniences, etc., being regularly and systematically attended to throughout their area.

V.D. Clinics.—Under the auspices of the British Social Hygiene Council, 387 pamphlets of the Scottish Committee containing a list of treatment centres in Scotland approved by the Department of Health for Scotland under the Public Health (Venereal Disease) Regulations (Scotland) 1916, were distributed on board vessels arriving in the Port Sanitary Area. These leaflets are printed in several languages, offer free treatment by the Local Authority, specify the days and hours clinics are open, and thereby meet the special requirements of shipping.

In the execution of the aforementioned duties of the Port Sanitary Department much valuable assistance has been received from H.M. Collector of Customs, the Leith Dock Commissioners, the Granton Harbour Officials, the Board of Trade, and the various shipping companies and agents to whom this opportunity is taken of expressing my thanks for their esteemed co-operation.

PROSECUTIONS.

In connection with the administration of the Acts, Orders, Regulations and Bye-laws relating to the work of the various sections of the Department, it was necessary to institute legal proceedings in 48 cases, and, in each, a conviction was secured. Particulars of these prosecutions are given in Appendix 8.

STAFF.

I desire to express my cordial appreciation of the enthusiastic services rendered by all the members of the staff.

I am,

My Lord Provost, Ladies and Gentlemen,

Your obedient Servant,

ALLAN W. RITCHIE, F.R.San.I., F.R.S.E.,
Chief Sanitary Inspector.

APPENDIX 1.

REPORT for the year ended 31st December 1936, on proceedings taken with regard to the Inspection, Improvement, and Demolition and Closure of Dwelling-Houses.

HOUSING (Inspection of District) REGULATIONS (SCOTLAND) 1928.

1. Number of dwelling-houses* inspected :—		
(a) During the year	(a)	489
(b) Since 1st January, 1931	(b)	14,596
2. Number of dwelling-houses* which on inspection were considered to be in any respect unfit for human habitation :—		
(a) During the year	(a)	457
(b) Since 1st January, 1931	(b)	10,877

BURGH POLICE (SCOTLAND) ACT, 1892.

3 }
to } This Act not operative in Edinburgh.
10 }

HOUSING (SCOTLAND) ACT, 1925.

11. Number of houses of (a) one apartment, and (b) two apartments, for erection of which consent of Town Council was given during year in terms of Section one hundred and eleven	(a) } (b) }	Nil.
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HOUSING (SCOTLAND) ACT, 1930.

12. Number of dwelling-houses in respect of which notices were served during year under Section 14 (1)†		Nil.
13. Number of dwelling-houses rendered fit for human habitation during year following on notices under Section 14 (1)†		Nil.
14. Number of dwelling-houses in respect of which work has been done during year by Town Council under Section 15 (1)		Nil.
15. Number of dwelling-houses in respect of which in terms of Section 17 a demolition order or closing order under Section 16 (3) has been substituted during year for a notice under Section 14 (1)		Nil.
16. Number of dwelling-houses in respect of which notices were served during year in terms of Section 16 (1)		135
17. Number of dwelling-houses in respect of which, following on notice under Section 16 (1) :		
(a) undertaking has been given during year that house will not be used for human habitation until it has been rendered so fit	4	135
(b) Undertaking has been given during year that house will be rendered fit	—	
(c) Demolition orders‡ have been made during year under Section 16 (3)	39	
(d) Closing orders have been made under Section 16 (3) and (4)	92	
18. Number of dwelling-houses rendered fit during year following on undertakings under Section 16 (2)		Nil.
19. Number of dwelling-houses rendered fit for human habitation during year at instance of Town Council without formal notice under Housing (Scotland) Act, 1930		Nil.
20. Number of dwelling-houses in respect of which closing orders have, in terms of Section 16 (3), been determined by Town Council during year following upon houses having been rendered fit for human habitation		Nil.
21. Number of houses in respect of which advances have been made during year in terms of Section 34 towards cost of repairs and amount so advanced		Nil.

*Houses inspected more than once during year should be entered only once.

†If action for repair of houses has been taken under other powers please state these powers and number of houses dealt with.

‡If permission to reconstruct a building has been granted, the number of houses existing prior to the reconstruction should be stated (see in this connection, sub-section (3) of Section 49 of the Housing (Scotland) Act, 1930).

Note.—Any general information or observations as to the character of defects usually found to exist, as to the extent to which overcrowding was found to prevail and the steps taken to remedy it, or as to the work of inspection generally, should be entered in the space below :—

The conditions found were those generally associated with insanitary houses, viz., poor lighting, dampness, lack of sufficient water-closet and sink accommodation, disrepair of external and internal structure, over-subdivision of property, dark common lobbies.

Regarding Overcrowding.—See Overcrowding Report by M.O.H. and C.S.I., which was issued after First Survey under the Housing (Scotland) Act, 1935, was carried out.

DEPARTMENT OF HEALTH FOR SCOTLAND.
SLUM CLEARANCE and DECROWDING
DURING
THE YEAR 1936
BY
THE LOCAL AUTHORITY OF EDINBURGH.

CLEARANCE OF UNFIT HOUSES	NUMBER OF	
	Houses Vacated	Persons Displaced
As a result of action under :—		
<i>The Housing (Scotland) Act, 1930 :</i>		
(1) Part I. of the Act—		
<i>Clearance Areas—Unfit Houses</i>	159	633
(2) Part II. of the Act—		
<i>Other than Clearance Areas :—</i>		
(a) <i>Unfit Houses under Demolition Orders</i>	32	} 596
(b) <i>Unfit Houses under Closing Orders</i>	119	
(c) <i>Unfit Houses under Undertakings (Sec. 16 (2))</i>	21	
<i>The Housing (Scotland) Act, 1935 :</i>		
Part I. of the Act—		
<i>Re-Development Areas—Unfit Houses</i> . . . . .	...	...
Total	331	1,229

DECROWDING OF FIT HOUSES.

Number of families decrowded from fit houses :

(a) <i>By transference to houses owned by Local Authority</i>	255
(b) <i>By transference to houses in private ownership (estimated)</i>	29
Total	284

NUISANCES ABATED AND SANITARY IMPROVEMENTS IN 1936.

APPENDIX 3.

NATURE OF NUISANCE.	Calton.	Canongate.	Newington	Morningside.	Merchiston.	Gorgie.	Haymarket	St. Bernard's.	Broughton.	St. Stephen's.	St. Andrew's.	St. Giles.	Dalry.	George Square.	St. Leonard's	Portobello.	South Leith.	North Leith.	West Leith.	Central Leith.	Liberton.	Collinton.	Corstorphine and Cramond.	TOTALS.
<i>Water-closets:—</i>																								
Water-closets introduced	3	4	1	1	2	2	2	1	2	2	..	3	5	1	4	2	2	4	1	1	3	..	..	3
New apparatus substituted . . . . .	..	10	6	..	..	3	2	..	1	2	3	9	5	5	22	10	3	7	2	2	6	..	1	43
Improved or repaired . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	114	
Partitions of W.C. apartments repaired	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
Water-closets and sinks in a filthy condition and cleansed	1	1	..	..	1	4	..	1	1	1	..	1	1	2	12	..	..	3	5	2	..	..	16	
Choked water-closets cleared	1	1	..	..	..	..	..	5	..	..	3	..	2	4	..	..	..	3	..	..	4	..	40	
New water-closet apartments provided . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	
<i>Sinks, Tubs, and Wash-hand Basins:—</i>																								
Sinks introduced	4	3	1	..	..	..	2	..	3	2	..	2	12	1	17	1	2	2	2	2	4	..	..	4
Insanitary sinks abolished . . . . .	..	3	..	..	..	..	2	..	3	2	4	2	12	1	17	1	2	2	2	1	..	..	..	59
Earthenware sinks and tubs substituted	4	3	1	1	..	..	2	..	3	2	6	6	11	4	29	3	3	6	2	2	..	..	..	59
Repairs (woodwork, etc)	4	3	1	1	3	21	5	..	5	2	3	6	1	..	5	..	..	2	2	2	..	..	..	115
Choked sinks, wash-tubs, etc., cleared	..	1	1	2	1	3	..	..	..	2	..	..	..	..	..	..	..	2	..	..	..	..	..	34
Wash-hand basins renewed or introduced . . . . .	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	4
<i>Drain:—</i>																								
Choked drains cleared	20	7	6	1	2	7	2	5	8	6	9	6	6	3	23	7	9	34	11	10	2	..	4	188
Choked surface traps cleared . . . . .	..	..	1	..	1	10	3	..	1	3	1	1	4	4	9	3	3	4	1	1	..	..	..	50
Drains repaired or renewed . . . . .	..	..	..	2	1	..	..	1	4	4	1	1	1	..	2	..	..	..	..	..	..	..	..	18
Soil pipes repaired or renewed	2	1	..	..	..	..	..	..	3	1	..	..	..	..	7	..	1	1	..	..	..	..	..	19
Waste pipes repaired or renewed	5	4	3	1	1	1	2	..	3	2	4	3	5	6	20	2	2	2	2	..	..	..	..	68
Rain-water conductors repaired or renewed . . . . .	..	..	..	1	..	..	1	1	1	..	1	8	..	5	3	..	..	1	..	..	..	..	..	22
CARRY FORWARD	60	38	21	9	14	51	21	15	38	32	39	48	65	38	171	29	27	71	28	23	19	5	862	

APPENDIX 3—continued.

NUISANCES ABATED AND SANITARY IMPROVEMENTS IN 1936—continued.

NATURE OF NUISANCE.	Calton.	Canongate.	Newington.	Morningside.	Merchiston.	Gorgie.	Haymarket.	St. Bernard's.	Broughton.	St. Stephen's.	St. Andrew's.	St. Giles.	Dalry.	George Square.	St. Leonard's.	Portobello.	South Leith.	North Leith.	West Leith.	Central Leith.	Liberton.	Colinton.	Corstorphine and Craigmond.	Totals.
BROUGHT FORWARD	60	38	21	9	14	51	21	15	38	32	39	48	65	38	171	29	27	71	28	23	19	..	5	862
<i>Water Supply.</i> —																								
Cisterns found dirty	33	33	17	13	16	54	46	7	21	5	19	86	48	64	37	3	38	42	23	17	..	..	..	622
Cisterns found without covers	4	..	..	..	..	..	1	2	..	1	..	3	2	2	2	2	4	8	3	3	..	..	..	36
Cisterns repaired or renewed	4	..	..	1	..	..	1	..	..	..	2	2	..	2	..	..	2	4	1	1	..	..	..	20
Branches taken off the main . . . . .	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1
Water pipes repaired	1	2	1	..	..	..	..	..	..	1	..	3	..	2	3	1	1	2	..	..	..	..	1	19
Houses temporarily without water supply due to burst pipes, etc. . . . .	..	1	..	..	..	..	..	..	..	..	3	2	1	..	2	..	..	..	1	..	..	..	..	10
<i>Repairs to Houses.</i> —																								
Floors, hearths, doors, etc., repaired	2	5	..	..	1	2	..	1	1	..	3	2	2	2	9	1	1	2	..	1	..	..	..	35
Partition walls repaired . . . . .	..	3	1	1	2	3	1	1	2	2	3	10	4	11	11	4	2	1	3	4	1	..	..	1
Windows and skylights repaired or renewed	9	1	..	..	..	..	..	..	..	1	1	..	1	..	..	..	..	..	..	..	..	..	..	80
Coal bunkers repaired or provided	1	1	..	..	..	..	1	..	..	..	3	3	4	2	4	2	1	1	1	1	..	..	..	8
Grates or ranges repaired or substituted	2	..	..	..	..	..	1	..	1	..	3	3	4	2	4	2	1	1	..	..	..	..	..	24
Wall and ceiling plaster repaired	14	3	1	..	4	4	4	3	7	5	3	3	5	8	12	1	5	11	4	3	..	..	1	102
Defective roofs repaired	2	..	1	1	1	..	..	..	..	..	2	4	5	1	5	..	..	9	2	2	..	..	..	33
Boiler of kitchen range renewed	2	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	4
<i>Nuisances in Houses.</i> —																								
Floors and bedding of houses in a dirty condition and cleaned by tenants	6	1	9	..	1	3	..	1	1	3	1	4	1	5	5	11	3	2	..	5	29	..	5	96
Nuisances due to bad smells in dwelling houses caused by escape of gas, dead vermin, etc.	3	2	4	1	4	1	1	..	6	1	4	1	2	4	3	1	3	2	3	2	..	..	..	48
Smoke in houses due to foul or defective vents	11	2	2	5	2	..	2	5	3	1	5	15	8	4	17	2	..	4	6	4	..	..	..	96
Dampness of houses remedied or abated	7	2	2	1	3	2	2	..	2	..	3	4	4	1	1	..	2	3	2	7	..	..	..	48
CARRY FORWARD	161	93	59	32	49	121	78	37	82	52	92	190	152	147	282	57	89	163	75	73	49	..	12	2,145

APPENDIX 3—continued.

NATURE OF NUISANCE.	Calton.	Canongate.	Newington.	Morningside.	Merchiston.	Gorgie.	Haymarket.	St. Bernard's.	Broughton.	St. Stephen's.	St. Andrew's.	St. Giles.	Dalry.	George Square.	St. Leonard's.	Portobello.	South Leith.	North Leith.	West Leith.	Central Leith.	Liberton.	Colinton.	Corstorphine and Cramond.	TOTALS.
BROUGHT FORWARD	161	93	59	32	49	121	78	37	82	52	92	190	152	147	282	57	89	163	75	73	49	..	12	2,145
Nuisances in Houses (continued) :—																								
Houses overcrowded	22	35	12	...	2	29	4	2	7	16	16	12	44	19	15	38	16	21	40	14	13	12	16	391
Houses and shops flooded from defects on flats above	6	...	3	3	1	...	...	1	...	1	4	1	1	2	7	1	1	6	2	1	...	...	...	41
Animals kept in or in close proximity to dwellings	3	...	3	4	3	...	1	1	5	...	1	2	...	2	1	1	3	...	...	...	1	...	...	31
Houses distempered, papered or painted by—																								
Tenants . . . . .	...	...	...	1	...	1	...	1	2	5	...	1	2	1	3	1	3	1	1	3	...	...	...	25
Owners	3	2	...	1	4	1	...	3	32	7	1	23	12	3	4	3	7	2	...	2	...	...	...	111
Stairs, Passages, etc. :—																								
Staircases painted	87	35	33	34	24	80	34	60	75	56	79	10	66	50	97	16	29	55	88	53	2	...	36	1,099
Stairs and passages in a dirty condition and cleansed by tenants	74	44	23	42	44	80	29	14	70	22	47	55	28	53	51	16	23	201	36	19	2	...	12	985
Dogs and cats committing nuisance in common stairs and back greens	15	4	7	13	8	8	7	4	13	13	11	5	8	15	17	9	2	8	6	3	4	...	6	186
General :—																								
Premises infested by rats	14	26	20	25	13	16	24	34	14	10	15	25	22	10	12	26	16	22	11	9	9	14	37	424
Premises infested by other vermin	12	26	11	...	7	7	6	9	2	8	17	28	15	8	11	4	20	17	7	15	3	3	4	240
Accumulations of rubbish, garbage and filth removed from areas, roofs, cellars and vacant houses	129	33	26	17	15	17	20	19	117	21	27	160	115	125	125	35	319	674	75	219	4	1	1	2,294
Accumulations of manure near dwellings . . . . .	...	3	4	1	1	...	2	3	6	2	...	...	...	...	...	4	...	...	1	3	1	...	1	32
Disused cellars cleaned and closed	1	...	...	...	...	3	1	2	7	4	5	5	2	5	10	5	2	3	1	4	...	...	...	60
Tenants casting garbage over windows	25	3	13	34	9	17	13	8	18	9	10	17	11	22	25	4	3	7	2	4	...	...	...	254
Noise nuisances	2	...	2	1	3	...	8	1	5	1	2	...	...	1	...	2	...	...	1	...	...	...	...	27
Seasonal workers' huts found dirty and cleansed . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7
Miscellaneous nuisances	14	8	13	10	6	5	12	3	4	15	10	20	9	3	3	7	9	15	5	...	3	1	16	191
TOTALS	568	312	229	218	189	384	240	202	459	242	337	554	487	466	663	229	542	1195	351	422	92	32	144	8,543

SUMMARY.

Complaints by citizens	2,432
„ „ other Departments	193
Nuisances discovered and reported by District Inspectors	5,918
Total nuisances dealt with by the Department	<u>8,543</u>

Intimations of existence of nuisance served	1,432
Notices to remove nuisances served at the instance of the Local Authority	25
Intimations served in connection with renewal and introduction of sinks and water-closets	96
Notices served do. do. do. do. do.	10
Notices delivered cautioning persons against casting garbage over windows	1,744
Notices served on occupiers failing to take due rotation of stair sweeping and washing	218
Notices served for the cleaning of dirty areas, cellars, etc.	66
Notices and letters served for the white-washing and cleansing of houses .	71
Notices and letters served for the removal of accumulations of manure . .	12
Intimations under Section 109 of the Housing (Scotland) Act, 1925 . . .	324
Notices served in connection with the painting of common staircases . . .	4,002
Notices served in connection with the cleansing of water cisterns	627
	<u>8,627</u>

Number used in common by the Tenants of

[illegible]

APPENDIX 5.

Atmospheric Pollution.—Monthly Record of Deposits.
1936.

Month.	Station.	Millimetres of Rainfall.	Total Insoluble Matter.	Total Soluble Matter.	Total Solids.	Total Solids.
			Metric Tons per Sq. Kilometre.	Metric Tons per Sq. Kilometre.	Metric Tons per Sq. Kilometre.	English Tons per Sq. Mile.
January .	Leith Links . .	83.97	3.77	3.18	6.95	17.79
	Bruntsfield House	87.62	2.79	3.33	6.12	15.67
	St. Andrew Square	74.95	5.68	2.85	8.53	21.84
February	Leith Links . .	50.22	2.84	2.51	5.35	13.70
	Bruntsfield House	59.87	2.69	2.98	5.67	14.52
	St. Andrew Square	52.76	5.53	3.38	8.91	22.81
March .	Leith Links . .	38.27	2.59	2.84	5.43	13.90
	Bruntsfield House	49.95	2.30	4.09	6.39	16.35
	St. Andrew Square	40.05	6.58	3.04	9.62	24.63
April .	Leith Links . .	30.58	3.42	2.20	5.62	14.38
	Bruntsfield House	32.94	3.12	1.78	4.90	12.55
	St. Andrew Square	28.32	5.74	2.77	8.51	21.78
	Glencorse Reservoir	44.59	1.03	2.23	3.26	8.31
May .	Leith Links . .	14.65	4.98	1.52	6.50	16.64
	Bruntsfield House	21.87	4.54	1.40	5.94	15.22
	St. Andrew Square	20.86	5.33	2.18	7.51	19.22
	Glencorse Reservoir	24.98	1.29	1.60	2.89	7.35
June .	Leith Links . .	32.40	4.59	1.30	5.89	15.08
	Bruntsfield House	33.75	4.06	1.69	5.75	14.72
	St. Andrew Square	31.86	5.21	1.47	6.68	17.10
	Glencorse Reservoir	32.23	1.10	2.40	3.50	8.93
July .	Leith Links . .	88.02	3.64	2.46	6.10	15.64
	Bruntsfield House	87.48	8.21	3.32	11.53	29.54
	St. Andrew Square	84.24	6.48	2.34	8.82	22.57
	Glencorse Reservoir	87.03	0.75	2.10	2.85	7.26
August .	Leith Links . .	41.99	5.78	1.93	7.71	19.74
	Bruntsfield House	33.28	2.19	1.06	3.25	8.32
	St. Andrew Square	35.24	7.53	1.97	9.50	24.32
	Glencorse Reservoir	48.43	0.79	1.56	2.35	5.98
September	Leith Links . .	74.59	3.25	2.54	5.79	14.84
	Bruntsfield House	79.52	4.13	2.07	6.20	15.88
	St. Andrew Square	78.30	5.94	2.83	8.77	22.44
	Glencorse Reservoir	71.98	0.76	1.77	2.53	6.47
October .	Leith Links . .	29.97	3.13	1.85	4.98	12.75
	Bruntsfield House	42.83	3.39	3.59	6.98	17.87
	St. Andrew Square	32.89	5.94	2.83	8.77	22.45
	Glencorse Reservoir	75.75	0.41	2.96	3.37	8.59
November	Leith Links . .	47.93	2.75	2.97	5.72	14.64
	Bruntsfield House	73.58	3.47	5.29	8.76	22.42
	St. Andrew Square	49.60	4.84	3.07	7.91	20.25
	Glencorse Reservoir	77.29	0.87	2.94	3.81	9.72
December	Leith Links . .	44.82	3.46	4.39	7.85	26.10
	Bruntsfield House	56.84	3.42	4.89	8.31	21.28
	St. Andrew Square	46.44	4.27	3.52	7.79	19.93
	Glencorse Reservoir	63.66	0.57	2.66	3.23	8.25

APPENDIX 6.

SHOPS ACTS 1912-1934—STATEMENT FOR 1936.

INSPECTIONS MADE.

Retail Shops, Wholesale Shops and Warehouses	7,244
Number of evenings on duty to check observance of Evening Closing Orders	177
Number of Saturday afternoons on duty to check observance of Weekly half-holiday Orders	28
Number of Sundays on duty to check observance of Hairdressers' and Barbers' Shops (Sunday Closing) Act	1

CONTRAVENTIONS REGARDING HOURS OF EMPLOYMENT, CLOSING ORDERS, ETC.

Hours of Employment of Young Persons	25
Overtime	4
Intervals for Meals and Rest Periods	16
Restriction of Night and Early Morning Employment for Young Persons	3
Weekly Half-holiday for Assistants including affixing Notices	528
Failure to observe Half-holiday Orders, Closing for Weekly half-holiday, or displaying prescribed Notice	603
Failure to observe Evening Closing Orders or General Closing Hours	78

NOTICES, ETC.

Failure to affix Abstract of Act re hours of employment, etc.	662
Failure to keep Record of actual hours worked and intervals allowed	638
Failure to affix Notice re seats for female shop assistants	596

HEALTH AND COMFORT PROVISIONS.

Ventilation—Improvements effected	20
Lighting—Improvements effected	9
Heating—Means provided or Improvements effected	20
Suitable facilities provided where meals are taken in premises	11
Seats for female assistants provided—Number of instances	25

WASHING FACILITIES.

Water supply introduced	1
Main water supply provided	12
Sinks or wash-hand basins introduced	18
Earthenware sinks substituted	31
Hot water supply provided	4
Repairs to appliances	60

SANITARY ACCOMMODATION.

Water-closets introduced	16
Water-closets substituted (or replacements)	15
Water-closets removed to more sanitary situation	21
Separate sanitary accommodation for sexes provided	3
Intervening ventilated spaces provided	87
Lighting and/or ventilation provided or improved	64
Repairs to appliances, walls, ceilings, floors, windows, etc.	99
Dirty water-closets : cleansed or limewashed	85
Miscellaneous repairs, etc., in shops	19

CLEANLINESS.

Dirty walls and ceilings—painted or limewashed	107
Dirty floors, etc.	75
Accumulations of refuse removed	52
Intimations served under Shops Acts	129
Notices served under Shops Acts	46
Notices served under Local and General Acts	2
Letters sent under Shops Acts	304

PROSECUTIONS.

(a) Convictions	28
(b) Fines imposed	£17 15s.

APPENDIX 7.

*Port Sanitary Inspection—Annual Statement.**Year 1936.*

Ships boarded and inspected	804
Re-visits made	634
Nuisances discovered	4,251
Communications written	22
Notices served	27
Verbal warnings	242
Ships fumigated or otherwise treated for vermin by owners	149
Fumigation certificates granted	34
International Fumigation Certificates granted	23
International Exemption Certificates granted	135
Local fumigation certificates granted	11
Rats exterminated	871
Ships provided with rat guards	607
Notices of regulations served upon Masters or Officers in charge	387
V.D. Pamphlets distributed on behalf of the B.S.H. Council	387
Rats submitted for bacteriological examination	59
Negative	59
Nuisances abated	4,143

Nuisances Discovered.

Dirty floors, tables, decks, etc.	709
Dirty bunks and bedding	1,206
Dirty partitions and ceilings	379
Dirty lockers	425
Foul closets and latrines	164
Foul wash basins	38
Foul sinks	12
Foul baths	7
Choked scuppers	45
Choked and defective latrines	18
Choked and defective wash basins	11
Choked and defective sinks and baths	21
Accumulation of garbage, refuse, etc.	147
Dirty fresh water tanks	76
Dirty and offensive bilges	265
Dirty galleys, food stores, pantries, etc.	93
Dirty wash places	89
Dampness in quarters	12
Ships without rat guards	108
Presence of rats and mice	84
Presence of cockroaches and beetles	32
Presence of bugs and fleas	71
Miscellaneous	239
Total	<u>4,251</u>

Rat Destruction Measures in Dock Area.

Baits laid	10,400
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No.	Nature of Complaint.	Enactment Contravened.	Court Tried.	Result.
1	Preservative in Mince	Public Health (Preservatives, etc., in Food) Regulations (Scotland), Sect. 4 .	Burgh Court . .	Fined £3
2	Do.	Do.	Burgh Court . .	Fined £3
3	Do.	Do.	Burgh Court . .	Fined £3
4	Do.	Do.	Burgh Court . .	Fined £2
5	Altering the mode of occupancy of dwelling-house .	Edinburgh Corp. Order, 1926, Sect. 26 (d) (ii.)	Dean of Guild Court .	Fined £1 1s.
6	Preservative in Mince	Public Health (Preservatives, etc., in Food) Regulations (Scotland), Sect. 4 .	Burgh Court . .	Fined £2
7	Do.	Do.	Burgh Court . .	Fined £2
8	Do.	Do.	Burgh Court . .	Fined £3 or 20 Days.
9	Do.	Do.	Burgh Court . .	Fined £2 or 30 Days.
10	Do.	Do.	Burgh Court . .	Fined £1 or 10 Days.
11	Selling Articles after Closing Hours	Shops (Hours of Closing) Act, 1928, Sect. 1 (2)	Sheriff Court . .	Fined £1.
12	Preservative in Mince	Public Health (Preservatives, etc., in Food) Regulations (Scotland), Sect. 4 .	Burgh Court . .	Admonished.
13	Failure to Sweep and Wash Common Stair	Bye-laws for Cleansing of Common Stairs, etc.	Burgh Court . .	Admonished.
14	Selling Coal on Half-Holiday	Edinburgh Coal Merchants and Agents (Shops Act) Order, 1934	Sheriff Court . .	Fined 10s.
15	Do.	Do.	Sheriff Court . .	Fined 10s.
16	Do.	Do.	Sheriff Court . .	Fined 10s.
17	Preservative in Mince	Public Health (Preservatives, etc., in Food) Regulations (Scotland) Sect. 4 .	Burgh Court . .	Fined £5.
18	Do.	Do.	Burgh Court . .	Fined £3 3s.
19	Selling Ice Cream without a Licence	Edinburgh Corp. Order, 1933, Sect. 151 (1a, 1b).	Burgh Court . .	Admonished Pld. Guilty
20	Selling Articles after Closing Hours	Shops (Hours of Closing) Act, 1928, Sect. 1 (1)	Sheriff Court . .	Fined £1.
21	Do.	Do.	Sheriff Court . .	Fined £1 10s
22	Do.	Do.	Sheriff Court . .	Fined 10s.
23	Do.	Do.	Sheriff Court . .	Fined 10s.
24	Do.	Do.	Sheriff Court . .	Fined £1.
25	Do.	Do.	Sheriff Court . .	Fined £1.
26	Do.	Do.	Sheriff Court . .	Fined £1.

Report of Prosecutions instituted by the Sanitary Department during the year ended 31st December 1936—continued.

No.	Nature of Complaint.	Enactment Contravened.	Court Tried.	Result.
27	Preservative in Mince	Public Health (Preservatives, etc., in Food) Regulations (Scotland), Sect. 4	Burgh Court . .	Fined £3.
28	Do.	Do.	Burgh Court . .	Fined £3.
29	Selling Articles after Closing Hours	Shops (Hours of Closing) Act, 1928, Section 1 (i)	Sheriff Court . .	Fined 10s.
30	Do.	Do.	Sheriff Court . .	Fined 10s.
31	Do.	Do.	Sheriff Court . .	Fined 10s.
32	Do.	Do.	Sheriff Court . .	Fined 10s.
33	Do.	Do.	Sheriff Court . .	Fined £1.
34	Do.	Do.	Sheriff Court . .	Fined £1.
35	Do.	Do.	Sheriff Court . .	Fined 5s.
36	Failure to Substitute Earthenware or Fireclay Sink for iron appliance	Edinburgh Corporation Order, 1930, Section 26	Sheriff Court . .	Fined 10s.
			Burgh Court . .	Admonished.
37	Selling Articles after Hours	Shops (Hours of Closing) Act, 1928, Section 1 (i)	Sheriff Court . .	Fined 10s.
38	Altering mode of occupancy of Dwelling-house	Edinburgh Corporation Order, 1926, Section 26 (d) (ii).	Dean of Guild Court . .	Fined £3 3s., including expenses.
39	Selling Articles after Closing Hours	Shops (Hours of Closing) Act, 1928, Section 1 (i)	Sheriff Court . .	Fined 10s.
40	Do.	Do.	Sheriff Court . .	Fined 10s.
41	Do.	Do.	Sheriff Court . .	Fined 10s.
42	Do.	Do.	Sheriff Court . .	Fined 10s.
43	Do.	Do.	Sheriff Court . .	Admonished.
44	Do.	Do.	Sheriff Court . .	Fined 10s.
45	a. Selling Articles after Closing Hours. b. Failure to Exhibit Notices in exterior and in interior of Shop	Shops (Hours of Closing) Act, 1928, Section 1 (i) Edinburgh Chemists and Druggists (Shops Act) Closing Order, 1919, Section 3a	Sheriff Court . . a. } b. }	Fined 10s.
46	Preservative in Mince	Public Health (Preservatives, etc., in Food) Regulations (Scotland), Section 4	Burgh Court . .	Fined £2.
47	Failure to Sweep and Wash Stair	Byelaws for Cleansing of Common Stairs, etc.	Burgh Court . .	Admonished.
48	Preservative in Mince	Public Health (Preservatives, etc., in Food) Regulations (Scotland), Section 4	Burgh Court . .	Fined £1.

VETERINARY DEPARTMENT,

PUBLIC HEALTH CHAMBERS,

JOHNSTON TERRACE,

EDINBURGH, 1, 15th April, 1937.

To

*The Lord Provost, Magistrates, and**Council of the City of Edinburgh.*

MY LORD, LADIES AND GENTLEMEN.

I beg to submit, for transmission to the Department of Health for Scotland, my Report for the year ending 31st December, 1936, which has been called for by the Department in virtue of their powers under Section 4 (5) of the Milk and Dairies (Scotland) Act, 1914.

I am,

Your obedient Servant,

A. GOFTON, F.R.C.V.S.,

Chief Veterinary Inspector.

To

*The Secretary,**Department of Health for Scotland,**Edinburgh.*

SIR,

I beg to submit herewith my Report for the year 1936, as required by Section 4 (5) of the Milk and Dairies (Scotland) Act, 1914. An account of the year's work in connection with the inspection of meat and other foodstuffs, including port food inspection, is added.

MILK AND DAIRIES (SCOTLAND) ACT, 1914.

No administrative difficulties have been encountered during the year in the operation of the Act, and no points have arisen which merit special attention.

Inspection of Cows and Dairy Byres.—In terms of the Act, the Veterinary Inspector is required to inspect the cattle in all registered dairies in the City from time to time and once at least in each year. In accordance with practice, the cattle in all the registered dairies in the City have been examined at intervals of one month. During the year 678 visits were made to registered dairies and the cattle therein inspected. In determining the duties of the Veterinary Inspector, under the Act, the Local Authority made provision for the periodical inspection of all dairy cattle in premises which were exempt from registration under the Act. In accordance with this requirement, 60 visits were made to non-registered dairies.

The newly-calved cows offered for sale in the market at Gorgie on the Tuesday and Wednesday of each week were subjected to inspection and examination in the market identical to that which takes place in registered dairy premises. During the year, 1,248 cows were so examined in the market, representing an average of 24 cows exposed for sale each week. Two cows were ordered out of the Market Byres on account of John's Disease and were slaughtered at the owner's risk.

Health of Cows, etc.—Apart from tuberculosis, 266 diseased cows were detected in the course of inspections of cattle in registered or exempt premises. The diseases encountered were as follows :—

Mastitis	140
Suppurating conditions of udders and teats	48
Indurated Udders	33
Retained Placenta	8
Psoroptic Mange and Ringworm	27
Injuries and General Disorders	10
	<hr/>
	266
	<hr/>

The cows in question were removed permanently or temporarily from the milking herds as cases required. The milk was withdrawn from sale in all cases in which risk was entailed of contamination or infection from the diseased condition. In appropriate cases it was fed to pigs or calves after boiling, otherwise it was destroyed.

Tuberculosis in Dairy Cows.—During the year 9 cows, on registered dairy premises in the City, which were found to be tuberculous, within the meaning of the Tuberculosis Order of 1925, were dealt with in terms of that Order. These animals were classified as follows :—Tuberculosis of the udder 4, chronic cough and showing definite clinical symptoms of tuberculosis 5.

The tuberculin test was not applied in any case under the powers contained in Section 22 of the Act. So far as the test was employed for the diagnosis of tuberculosis it was used under the powers contained in the Tuberculosis Order.

The incidence of tuberculosis in dairy cows in the City and district revealed by post-mortem statistics at the Abattoir during 1936 shows a lower occurrence than has been the average over a period of years. Of a total of 5,813 cows slaughtered, 2,389 or 41·10 per cent. were affected with tuberculosis in some degree. This compares with an average of 47·37 per cent. over the previous five years. In 11·80 per cent. of cases, the disease was advanced and the whole of the carcase and all the viscera were condemned. In 20·80 per cent. tuberculosis affected the viscera and localised areas on the carcase, and in 67·40 per cent., it was confined to one or more of the visceral organs. Tuberculosis was responsible for 86·5 per cent. (by weight) of seizures of cow beef from all causes, and 84·9 per cent. (by weight) of seizures of all classes of beef during 1936.

Number of Cowsheds.—At December, 1936, there were on the register 59 premises in the occupation of milk producers. The number of cowsheds on these premises was 98 and the average number of cows accommodated therein was 1,585.

One certificate of registration was transferred to a new tenant, and three were cancelled. The number of dairy premises in the occupation of milk producers in the City was thus reduced by three.

At December, 1936, the number of exempted premises was 27, and the number of cows therein 73. These premises are all licensed under the Cattle-sheds in Burghs (Scotland) Act, 1866. In only a few cases is milk sold from these premises. Exemption from registration under the Milk and Dairies (Scotland) Act, continued to be granted in those cases in which the amount of milk sold per day did not exceed two gallons.

Milk and Dairies Order, 1934.—Articles 4 to 14 of the Milk and Dairies Order 1934, have been complied with so far as these articles apply to the premises of milk producers in the City.

Milk and Dairies (Scotland) Act, 1914 (Sections 13, 14 and 21).—The City dairymen continue to observe the terms of Sections 13 and 14 of the Act with regard to the withdrawal from sale of the milk from a diseased cow and notification of the existence of disease.

The City being entirely a receiving and consuming district no question of taking samples of milk under Section 21 of the Act has arisen.

Milk (Special Designations) Order (Scotland), 1930.—Three producer's licences for the sale of designated milk under this Order have been in force during the year, namely, two "Grade A" and one "Certified." The licence for the production and sale of certified milk is held by the Royal Victoria Hospital Tuberculosis Trust, Gracemount Farm, Liberton. The average number of cows in milk is 30 and the production is approximately 17,000 gallons. The milk is in part retailed by the producers in the City, and in part utilised in Southfield Sanatorium which belongs to the Trust. The certificate of attestation under the Tuberculosis (Attested Herds) Scheme (Scotland) of the Department of Agriculture was renewed in respect of the herd belonging to the Royal Victoria Hospital Tuberculosis Trust.

All milks sold in the City under licences granted in terms of the Milk (Special Designations) Order, have been periodically sampled and subjected to bacteriological examination. During the year, 156 samples of graded milk were thus examined. Of these, 27 were samples of pasteurised milk and were representative of milk from both licensed and non-licensed pasteurisers.

Milk Supply—City Hospitals.—The dairy herds belonging to the Corporation, at Colinton Mains and Bangour Farms, have continued to supply milk to certain of the hospitals. Both herds were tested with tuberculin twice during the year. At Colinton Mains there were no reactors. At Bangour, one cow reacted at the autumn test. This animal was purchased in the spring and was submitted to a tuberculin test on the farm of origin and to a check test on arrival at Bangour, and did not react to either test. It is clear that she was infected at the time of purchase, but that infection was not then sufficiently established to induce a reaction to tuberculin. The positive tuberculin reaction was confirmed on post-mortem examination. As a precautionary

measure, the herd was retested three months after the reactor was detected and there were no reactions. Samples of milk from both farms were submitted to bacteriological examination at intervals and conformed to the bacterial standard for certified milk.

The average number of cows in milk and the approximate total output of milk for the year was :—

Colinton Mains, 80 cows, 70,055 gallons, and
Bangour, 75 cows, and 57,000 gallons.

Bacteriological Laboratory.

The following summary of work performed in the Laboratory during the year has been furnished by Mr W. Jowett, F.R.C.V.S., D.V.H.

Bacteriological Examination of Milk.—During the year 221 samples of milk were subjected to test for bacteriological standard. These comprised :—

Certified Milk	44
Grade "A" (Tuberculin Tested) Milk	34
Grade "A" (Tuberculin Tested) Milk, (as supplied to Schools)	31
Grade "A" and Standard Milk	20
Pasteurised Milk	27
Sterilised Milk	2
Milk for City Hospitals	7
Ordinary Market Milk	56
	221

Two samples of Certified milk fell below the standard specified in the Milk (Special Designations) Order in respect of general bacterial count, three in respect of coliform organisms, and four failed in both tests. Three samples of Grade "A" (T.T.) milk failed in both tests and ten in the coliform test only. Three samples of Standard milk failed in the coliform test. In all cases the faults were referred to the producers and the Local Authorities concerned.

In order to test the hygienic quality of ordinary market milk as sold in the City, 56 producers' samples were collected on arrival at the premises of distributors. Of these, 42 (equivalent to 75 per cent.) complied with the bacterial standard for Standard milk. Five cases were referred to the local authorities of the producing districts for enquiry into the conditions of production.

Three samples of Pasteurised milk which had been contaminated with a spore-bearing organism prior to pasteurisation, failed to conform to the bacterial standard for pasteurised milk. Coliform organisms were demonstrated in 7 samples.

Milk from Individual Cows in City Byres.—Eighty samples were examined for the presence of the tubercle bacillus and other forms of infection. The tubercle bacillus was demonstrated in 6 samples by microscopical examination. Of the remaining samples, it was found that various types of infection (streptococci, staphylococci, and *C. pyogenes*, etc.) were present in 43.

Bulk Milk Samples subjected to biological test for tuberculosis :—

(Brought forward incomplete at the end of 1935) :—

	30		
Tested and completed at 31st December, 1936	211		
Total . . .	241	Positive	13
		Inconclusive	18
Remaining under test at 31st December, 1936	33		
Total . . .	274		

Excluding inconclusive results due to the premature death of experimental animals, the samples tested and completed showed 5·82 per cent. to be infected with living tubercle bacilli.

Infection was traced in 9 of the 13 positive cases by reference to the Local Authorities concerned and reports were received that investigation had resulted in the slaughter, under the Tuberculosis Order, of 10 cows affected with tuberculosis of the udder. In the remaining 4 cases, in which negative reports were received, check samples taken in the City proved negative to the biological test, showing that infection had ceased, presumably by the disposal of infected animals after sampling and before conclusion of the first biological test.

In connection with tracing the sources of infection, 23 group and individual samples were submitted to microscopical and biological test in the Department and gave 1 positive result.

Biological Test of Graded Milks.—Six samples of Tuberculin Tested milk, as supplied to schools in the City, and 3 samples of Standard milk were tested and all proved negative.

Summary of Examinations Made—

Material.	Examined for.	Number.
Blood	Anthrax	182
Do.	Br. Abortus	10
Do. (Avian)	B. Pullorum	50
Skin Scrapings	Parasitic Mange	1
Do. do.	Ringworm	2
Expectorate	B. Tuberculosis	8
Milk	Do. (Microscopical)	80
Do.	Do. (Biological)	294
Do.	Str. Agalactiae	33
Do.	Bacteriological standards	221
Do.	Acetone	4
Do.	Blood	2
Do.	Fitness for use	19
Do.	Nematode Ova	2
Fæces	B. Tuberculosis	18
Miscellaneous Tissues	Br. Abortus	10
Do. do.	Actinobacillosis	1
Do. do.	Parasites	2
Do. do.	B. Anthracis	5
Do. do.	Adulteration	1
		945

Preparation of Vaccines.—Vaccines have been prepared, as in previous years, for use in the clinical work of the Department.

INSPECTION OF MEAT AND OTHER FOODS.

Fat Stock Markets.—The usual observation has been maintained in the fat stock markets throughout the year, a Veterinary Officer being detailed for duty in the markets on each market day. Twenty-five cattle, 9 sheep and 15 pigs were ordered out of the markets by the Veterinary Officer, on account of disease or injury. In all cases the animals were removed to the slaughterhouse and slaughtered at the owners' risk.

The following table shows the number of animals exposed for sale in the fat stock markets during 1936 :—

Cattle	.	.	.	.	.	.	52,131
Calves	.	.	.	.	.	.	6,053
Sheep	.	.	.	.	.	.	280,019
Swine	.	.	.	.	.	.	27,214
							<hr/> 365,417 <hr/>

Abattoir.—Supervision has been maintained in accordance with the usual practice at Gorgie Abattoir.

The number of animals passing through the slaughterhouse during 1936 is shown in the following table :—

Cattle	{	Oxen	.	.	.	.	30,834	
		Bulls	.	.	.	.	492	
		Cows	.	.	.	.	5,813	
		Heifers	.	.	.	.	1,778	
							<hr/>	38,917
Calves	.	.	.	.	.	.	.	3,726
Sheep	.	.	.	.	.	.	.	153,847
Swine	.	.	.	.	.	.	.	21,945
								<hr/>
								218,435

The gross total of animals slaughtered is higher by 10,298 than in 1935. With the exception of calves, there were increases in all classes of animals.

Carcases and Offal condemned in Abattoir.—Carcases partially or wholly condemned in the City abattoir weighed 206.66 tons. To this there falls to be added 115.97 tons (weight estimated) of condemned offal, making a total of approxi-

mately 322.63 tons. Tuberculosis was responsible for 42.16 per cent. of the number of carcase seizures and for 52.60 per cent. of the number of offal seizures. Comparison between the weight of meat seized on account of tuberculosis and of non-tuberculous disease, shows that tuberculosis was responsible for 84.9 per cent. of all beef seized and destroyed, for 52.9 per cent. of veal and 34.2 per cent. of pork. Details of the seizures are shown in the following tables :—

Number and weight of carcasses in the different classes of animals condemned at Abattoir during 1936 :—

	Totally Condemned.		Partially Condemned.		Total Weight in Lbs.
	Number.	Weight in lbs.	Number.	Weight in lbs.	
Oxen	85	49,345	338	49,348	98,693
Bulls	6	4,495	32	5,303	9,798
Cows	358	185,451	536	86,487	271,938
Heifers	16	7,143	22	2,744	9,887
Calves	56	3,885	14	561	4,446
Sheep	676	24,802	511	10,033	34,835
Swine	270	26,030	135	7,290	33,320
Total	1,467	301,151	1,588	161,766	462,917

Number of carcasses condemned in the different classes of animals slaughtered in Abattoir during 1936, and causes of condemnation :—

	CATTLE.										Sheep.		Swine.		TOTALS.
	Oxen.		Bulls.		Cows.		Heifers.		Calves.						
	Total.	Partial.	Total.	Partial.	Total.	Partial.	Total.	Partial.	Total.	Partial.	Total.	Partial.	Total.	Partial.	
Tuberculosis	62	252	5	27	282	497	13	18	19	9	...	...	58	46	1,288
Edema and or Emaciation.	3	...	...	...	29	...	1	...	9	...	408	133	19	...	602
Traumatism . . . . .	...	9	...	...	1	10	...	1	...	...	13	20	...	6	60
Septic conditions	2	21	...	1	2	7	1	2	3	1	16	51	10	23	140
Pericarditis	1	1	...	...	3	...	...	...	...	...	...	...	...	...	5
Peritonitis and Enteritis	3	18	1	1	3	9	...	...	...	...	19	10	13	8	85
Pleurisy and Pneumonia	5	26	...	3	4	7	...	1	5	4	36	269	35	50	445
Dead, Moribund and Illbled	7	...	...	...	9	...	...	...	10	...	171	...	15	...	212
Jaundice	1	...	...	...	1	...	...	...	2	...	...	...	4	...	8
Neoplasms . . . . .	...	2	...	...	...	3	...	...	...	...	...	2	...	...	7
Actinomycosis and Actinobacillosis . . . . .	...	8	...	...	...	...	...	...	...	...	...	...	...	...	8
Melanosis . . . . .	...	1	...	...	...	1	...	...	...	...	...	...	...	...	2
Mastitis . . . . .	...	...	...	...	16	2	...	...	...	...	6	18	1	...	43
Metritis . . . . .	...	...	...	...	2	...	1	...	...	...	1	...	...	...	4
Johne's Disease . . . . .	...	...	...	...	5	...	...	...	...	...	...	...	...	...	5
Umbilical Pyæmia . . . . .	...	...	...	...	...	...	...	...	5	...	...	...	...	...	5
Immaturity . . . . .	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
Uræmia	1	...	...	...	1	...	...	...	2	...	4	...	...	...	8
Malformation . . . . .	...	...	...	...	...	...	...	...	...	...	2	8	2	2	14
Swine Fever . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	110	...	110
Swine Erysipelas . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3
	85	338	6	32	358	536	16	22	56	14	676	511	270	135	3,055

Comparison between tuberculous and non-tuberculous diseases as causes of condemnation in carcases of animals slaughtered in Abattoir during 1936.

By Numbers.	CATTLE.						Sheep.	Swine	TOTAL.
	Oxen.	Bulls.	Cows.	Heifers.	Calves.	TOTAL.			
Tuberculosis . . . { Total Partial	62 252	5 27	282 497	13 18	19 9	381 803	... ...	58 46	439 849
Total and Partial	314	32	779	31	28	1,184	...	104	1,258
Non-tuberculous diseases { Total Partial	23 86	1 5	76 39	3 4	37 5	140 139	676 511	212 89	1,028 739
Total and Partial	109	6	115	7	42	279	1,187	301	1,767
By Weight.	Tuberculosis. (lbs.)		Non-tuberculous Disease. (lbs.)			Percentages tuberculous.			
Oxen	78,773		19,920			79.8			
Bulls	8,793		1,005			89.7			
Cows	235,431		36,507			86.5			
Heifers	8,537		1,350			86.3			
Calves	2,353		2,093			52.9			
Swine	11,405		21,915			34.2			

Number of organs condemned in the different classes of animals at Abattoir during 1936 (excluding organs of animals totally condemned).

	CATTLE.						Swine.	Sheep.	TOTAL.
	Oxen	Bulls.	Cows.	Heifers.	Calves	TOTAL.			
LUNGS :—									
Tuberculosis	891	78	1,754	45	55	2,823	277	...	3,100
Other Causes	169	6	49	1	13	238	683	322	1,243
HEARTS :—									
Tuberculosis	1	...	...	...	...	1	...	...	1
Other Causes	15	...	3	...	...	18	1	3	22
BOWELS :—									
Tuberculosis	353	26	638	28	5	1,050	80	...	1,130
Other Causes	27	1	19	...	...	47	228	7	282
STOMACHS :—									
Tuberculosis	51	7	104	4	1	167	21	...	188
Other Causes	354	6	55	5	...	420	12	7	439
SPLEENS :—									
Tuberculosis	50	7	94	4	2	157	48	...	205
Other Causes	7	...	2	...	2	11	2	...	13
LIVERS :—									
Tuberculosis	409	35	349	23	14	830	224	...	1,054
Other Causes	3,440	55	1,223	22	11	4,751	136	311	5,198
KIDNEYS :—									
Tuberculosis	37	5	68	5	...	115	...	...	115
Other Causes	59	2	42	1	...	104	4	4	112
UDDERS :—									
Tuberculosis . . . .	...	...	17	...	...	17	...	...	17
Other Causes . . . .	...	...	217	...	...	217	...	1	218
HEADS AND FEET :—									
Tuberculosis	841	73	715	36	2	1,667	1,064	...	2,731
Other Causes	115	9	11	4	...	139	14	18	171
Total	6,819	310	5,321	178	105	12,772	2,794	673	16,239

Percentage incidence of Tuberculosis in animals slaughtered at Abattoir during 1936 :

Cattle	{	Oxen	5.51	}	. . . . .	11.04	Per Cent.
		Bulls	24.19				
		Cows	41.10				
		Heifers	5.12				
Calves	.	.	.	.	.	2.01	
Swine	.	.	.	.	.	5.61	

Congenital Tuberculosis in Calves.—In order to obtain some definite information as to the number of calves which are born tuberculous in consequence of intra-uterine infection, detailed records have been made of the occurrence of tuberculosis in 10,000 calves slaughtered consecutively in the City Abattoir. The result of these observations which were concluded during the year, may be summarised as follows :

No. of calves examined	.	.	.	.	10,000	
Congenital infections	.	.	.	.	42	0.42 per cent.
Post natal infections	.	.	.	.	147	1.47 „
Total tuberculous	.	.	.	.	189	1.89 „

These results indicate that one calf in 238 is tuberculous at birth and show that the incidence of congenital tuberculosis in calves is higher than is generally estimated. Efforts were made to trace the mothers of the congenitally infected calves and the majority of those which were traced and slaughtered were affected with tuberculosis of the uterus.

Meat Contracts—City Hospitals, Etc.—In accordance with instructions, periodical visits were paid to the City Hospital and other institutions belonging to the Corporation, with a view to checking the quality of meat supplied by contractors and whether the meat conformed to specification. The attention of two contractors was directed to minor faults. One consignment was rejected as not conform to contract.

The carcasses of all animals slaughtered for food in the abattoir on Bangour Farm were inspected before issue to the Steward of the Hospital. The number of carcasses inspected during the year was Cattle 19, Sheep 75 and Pigs 55.

Wholesale Dead Meat Markets.—During the year meat (fresh and frozen) estimated to be equivalent to 51,328 carcasses was imported into the City for sale in the wholesale dead meat markets. In addition, considerable quantities of frozen boneless meat, kidneys, livers, tripe, etc., were received. It is not possible to ascertain with any approach to accuracy the amount of this class of material which arrives in the City. Daily visits of inspection were made to the dead meat markets and to the premises of wholesale meat traders.

Retail Shops, Street Hawkers, etc.—Periodical visits were made during the year to shops, etc., in which foodstuffs are prepared or exposed for sale.

Number of visits paid to Shops, etc., during 1936 :—

Butchers' Shops	929
Provision Shops	1,980
Fishmongers' Shops	325
Fruiterers' Shops	779
Meat Sales and Wholesale Meat Shops	2,052
Live Stock Sales and Markets	260
Street Hawkers	98
Hide and Skin Merchants	403
Fish Markets	310
Restaurants	402
	<hr/>
	7,538

Inspectors are instructed to observe and to report on the sanitary condition of food premises and on the conditions under which foodstuffs are stored. In 22 cases, occupiers of food premises were called upon to carry out cleansing or repairs, and 46 complaints relating to the sanitary condition of lavatories, drains, etc., on food premises were dealt with or passed to the Chief Sanitary Inspector for his attention.

Foodstuffs Seized in Markets, Etc.—The weights of foodstuffs seized in markets, shops, and other premises in the City during 1936 were as follows :—

	Weight in lbs.
Beef	4,409
Mutton	5,329
Pork	2,070 $\frac{3}{4}$
Veal	2,475
Poultry and Game	3,551
Edible Offal	324
Fruit and Vegetables	3,560
Provisions	1,454
Fish	30,333 $\frac{1}{2}$
	<hr/>
	53,506 $\frac{1}{4}$

Merchandise Marks Orders.—These Orders provide that imported meat, bacon, etc., on importation and when exposed for sale wholesale or retail, must be marked by a ticket (or otherwise as specified in the Orders), bearing the word " Empire " or " Foreign " as the case might be, or, alternatively, the name of the country of origin. Twenty-five warnings were given to retailers in respect of failures to observe the requirements of the Orders.

Carcases, etc., submitted for Inspection in terms of Article 10 of the Public Health (Meat) Regulations (Scotland), 1932.—This regulation places an obligation on the consignee of a carcase which he has reason to believe has not been inspected in the manner specified by the Public Health (Meat) Regulations, to report its receipt to the Local Authority of the district. In practice, the wholesale meat traders of the City notify the Veterinary Department in all cases in which they receive home-killed carcases from beyond the City boundaries. During the year, notification was received in respect of 1,321 carcases and 19 parts of carcases. After inspection, 113 carcases, 12 parts of carcases, and 3 heads were seized and destroyed.

Approval of Meat Storage.—Article 15 of the Public Health (Meat) Regulations (Scotland), 1932, requires persons selling meat from vans, carts, etc., who do not also keep an open shop for the sale of meat, to obtain from the Local Authority a certificate of approval of the accommodation provided for the storage of meat overnight. Six certificates were renewed in 1936. The storage accommodation provided is in each case satisfactory.

PORT FOOD INSPECTION.

The usual supervision has been maintained as to the condition and soundness of foodstuffs landed at the Port of Leith during 1936. No feature of outstanding interest has arisen.

The appended summary will serve to show the origin and the kinds of foodstuffs falling under the supervision of the Department at the Port of Leith.

Imported Foodstuffs inspected under the Public Health (Imported Food) Regulations (Scotland), 1932, during 1936 :—

Country of Origin.	Foodstuffs.	Number of Consignments.	
Holland	Bacon	150	
	Canned Meats	43	
	Casings	19	
	Fruit	241	
	Lard	2	
	Pigs' tongues	1	
	Provisions	877	
	Vegetables	598	
	Yeast	101	
		<hr/>	2,032
Denmark	Bacon	104	
	Canned Meats	57	
	Casings	1	
	Fish	5	
	Hams	50	
	Pigs' Feet	9	
	Poultry	3	
	Provisions	605	
	Sausages	10	
	Vegetables	44	
	Yeast	52	
		<hr/>	940
Canada	Bacon	2	
	Canned Meats	20	
	Frozen Meat	1	
	Fruit	24	
	Hams	1	
	Lard	14	
	Provisions	128	
	Vegetables	10	
		<hr/>	200
Germany	Canned Meats	1	
	Casings	2	
	Hams	13	
	Fruit	4	
	Provisions	82	
	Vegetables	18	
		<hr/>	120
U.S.A.	Bacon	1	
	Canned Meats	5	
	Fruit	6	
	Lard	1	
	Provisions	46	
	Vegetables	1	
		<hr/>	60
Belgium	Fruit	41	
	Hams	2	
	Provisions	53	
	Vegetables	39	
		<hr/>	135
Iceland	Fish (fresh)	20	
	Fish (salted)	53	
	Game	2	
	Meat	1	
		<hr/>	76
	Carry Forward		<hr/> 3,563

Country of Origin.	Foodstuffs.	Brought forward	Number of Consignments.
Argentine	Grain . . . . .	.	3,563
Malay	Fruit . . . . .	.	2
	Provisions	19	
		19	
Australia	Grain . . . . .	.	38
Egypt	Provisions	3	3
	Vegetables	4	
		—	7
Greece	Fruit . . . . .	.	2
Cyprus	Fruit . . . . .	.	6
South Africa	Provisions . . . . .	.	1
Poland	Hams	1	
	Provisions	6	
		—	7
South America	Cereals . . . . .	.	13
Sweden	Canned Fish . . . . .	.	3
Palestine	Fruit . . . . .	.	5
			—
			3,650

Imported Foodstuffs condemned or rejected and re-exported at the Port of Leith, during 1936 :—

Fruit :—	Weight in lbs.	Weight in lbs.
Bananas	40	
Grapes	18	
Grapefruit	280	
Lemons	8,936	
Melons	1,710	
Oranges	138,110	
Plums	220	
Pulp—Gooseberry	420	
Pulp—Strawberry	336	
	—	150,070
Vegetables :—		
Carrots	13,585	
Cauliflowers	380	
Onions	136,180	
Radish	396	
Spinach	420	
	—	150,961
Butter		112
Pigs' Tongues in Brine		336
		—
		301,479
		—
Equal to	Tons. 134	Cwts. 11
		Lbs. 87

Summary, showing total diseased and unsound foodstuffs dealt with by the Department in the City, during 1936 :—

	Weight in lbs.
At Abattoir—Carcases	462,917
Offal (weight estimated)	259,772
In Shops, Warehouses, etc.	53,506½
At the Port of Leith	301,479
	—
	1,077,674½
	—
Equal to	Tons. 481
	Cwts. 2
	Lbs. 10½

I am,

Your obedient Servant,

A. GOFTON, F.R.C.V.S.,

Chief Veterinary Inspector.

To
*Chairman and Members of the
 Public Health Committee.*

DISEASES OF ANIMALS ACTS.

LADIES AND GENTLEMEN,

The Acts confer power on the Ministry of Agriculture to make Orders for the control and prevention of animal diseases, to govern the import and export of animals and carcases, to control the conditions of transport of animals, by land and sea, and for other similar purposes. The following diseases are subject to administrative control by means of Orders made by the Minister :—

Anthrax.
 Foot and Mouth Disease.
 Parasitic Mange of Horses.
 Sheep Scab.
 Swine Fever.
 Bovine Tuberculosis and Contagious Abortion (for certain purposes only).
 Cattle Plague or Rinderpest. (1877.)
 Contagious Bovine Pleuro-Pneumonia. (1898.)
 Glanders and Farcy. (1928.)
 Epizootic Lymphangitis. (1906.)
 Rabies. (1922.)
 Sheep Pox. (1850.)

There have been no cases of the last six diseases in Great Britain since the dates shown against each.

In addition to numerous Orders controlling the movement of animals in foot-and-mouth disease infected areas, the Ministry of Agriculture issued the following new general Orders during the year :—

- (1) Regulation of Movement of Swine (Amendment) Order of 1936.
- (2) Regulation of Movement of Swine (Amendment) Orders of 1936 (Nos. 2 and 3).
- (3) Diseases of Animals (Disinfection) Order of 1936.
- (4) Diseases of Animals (Importation of Therapeutic Substances) Order of 1936.
- (5) Warble Fly (Dressing of Cattle) Order of 1936.
- (6) Fowl Pest Order of 1936.
- (7) Poultry Markets and Receptacles (Disinfection) Order of 1936.
- (8) Poultry and Hatching Eggs (Importation) Order of 1936.

Nos. 6, 7 and 8 did not become operative until 1937.

Anthrax.—One case of anthrax occurred in the Lairage at Gorgie Slaughterhouse, in a fat bullock consigned to the market from Roxburghshire. The carcase of the animal was buried.

Sixteen deaths of bovine animals on farms were reported and investigated in terms of the Edinburgh and Midlothian Order of 1910, the main object of which is to eliminate the risk of a case of anthrax escaping detection. The 16 cases were all

negative so far as notifiable disease was concerned and the carcasses were disposed of by the owners. The cause of death was similarly investigated in respect of 166 cattle, sheep and pigs (including the case of anthrax referred to) found dead on arrival of trains and boats, or which died, without previously observed illness, in the lairages attached to the Markets and Slaughterhouse.

Foot and Mouth Disease.—Sixty-seven outbreaks of foot-and-mouth disease occurred in Great Britain during 1936, entailing the slaughter of 5,114 animals, as compared with 56 outbreaks and 12,444 animals slaughtered in 1935. The movement of animals within the City was not restricted or regulated by any of the Orders issued by the Ministry of Agriculture in relation to these outbreaks. The last outbreak of foot-and-mouth disease in the City occurred in 1922.

The following Orders, which are more or less complementary to the principal foot-and-mouth disease Orders, have continued in operation, and the observations and visits necessary for their enforcement have been made:—Foreign Hay and Straw Order; Foot-and-Mouth Disease (Packing Materials) Order; Foot-and-Mouth Disease (Boiling of Animal Foodstuffs) Order; Importation of Carcasses (Prohibition) Order; Importation of Meat, etc. (Wrapping Materials) Order; and Movement of Animals (Records) Order.

In connection with the Movement of Animals (Records) Order, a check of the record books of stockowners in the City was again made with the assistance of the Police.

Parasitic Mange.—One suspected case of parasitic mange was reported during the year and proved negative on investigation.

Sheep Scab.—The City has again a clean record in respect of this disease. The Regulations made by the Local Authority, under the Sheep Scab Order, which require the dipping of all sheep in the City during the period 15th July to 31st August, and again during the period 1st September to 30th November, have remained in force. In terms of the Regulations, 18,433 sheep were dipped under supervision during the year.

The Sheep (Movement into Scotland and Northumberland) Order of 1933 requires the double-dipping of all sheep, unless intended for immediate slaughter, moved into Scotland from England (with the exception of Northumberland) as a measure of protection against the introduction of sheep scab into Scotland from south of the border. The movement is carried out under licence and the sheep may be dipped before or after the movement. One hundred and eighty-nine sheep were received in the City under licence in terms of this Order of which 1 died, 6 were moved to slaughterhouses and 182 to farms.

Swine Fever.—Eleven reports of suspected swine fever were investigated and the existence of disease was confirmed in 5 cases. The Local Authority became responsible for the removal and destruction of 218 carcasses and a large amount of offal from the infected premises and from the slaughterhouse.

Regulation of Movement of Swine Order.—Eighteen pigs were moved in terms of this Order under licence from scheduled areas in England to various premises in the City, subject to detention and isolation after arrival. Periodical visits were made to these premises with the double object of seeing that the conditions of the licence were fulfilled and to maintain observation on the health of the pigs.

Tuberculosis Order.—Sixteen animals were dealt with under the Tuberculosis Order of 1925. Of these, 7 were detected in the Live Stock Markets and were slaughtered by the owners at their own risk. The 16 animals were grouped as follows :—Tuberculosis of the Udder, 8 ; Tuberculous Emaciation, 3 ; and Chronic cough and showing definite clinical evidence of tuberculosis 5. Tuberculosis of the Udder constituted 50 per cent. of the cases dealt with in the City. The 9 animals slaughtered by the Local Authority were classified for compensation into—Advanced 6 (66·6 per cent.) and Not Advanced 3 (33·3 per cent.).

The aggregate value of the 9 animals was £133 10s., and the compensation paid amounted to £54 7s. 6d., an average of £6 0s. 10d. per animal. Seventy-five per cent. of the gross compensation is refunded by the Treasury and the proportion payable by the Local Authority was thus £13 11s. 10d. The gross salvage realised was £25 15s. After deducting outlays and the Local Authority's share of compensation, there remained a balance of £4 16s. 3d. in the favour of the Local Authority.

The Tuberculosis Order has now been in operation for 11½ years, and it is suggested that it might appropriately be reviewed and amended in certain respects. Two points which call for amendment may be mentioned. For purposes of compensation, animals slaughtered under the Order are classified as affected with advanced or not advanced tuberculosis. Compensation is paid at the rate of 75 per cent. of the agreed value of the animal before slaughter in not advanced cases, and 25 per cent. in advanced cases. Animals emaciated, or bordering on that condition, which, on post-mortem, show acute progressive tuberculous lesions confined to the thorax must be classified as not advanced and the owner must be paid 75 per cent. compensation. Clinically and pathologically these are advanced cases. On the other hand, cows affected with mammary tuberculosis and in good condition may only show very limited, localised and relatively inactive lesions on both pleura and peritoneum, but, as defined in the Order, they must be classified as affected with advanced tuberculosis and the owner receives only 25 per cent. of the agreed value. Clinically and pathologically these cases are not advanced. It should be possible to eliminate anomalies of this kind by amending the definition of advanced tuberculosis.

In following up cases of congenital tuberculosis in calves, the mother, in the majority of cases, is found to be the subject of tuberculous metritis with considerable vaginal discharge rich in tubercle bacilli. Such animals are only one degree less dangerous to public health than the cow with tuberculous mastitis. But, unless they are also the subjects of chronic cough, they do not come within the purview of the Order and must be left to continue disseminating infection. It is suggested that the Order should be amended to bring such animals within its scope.

Control of Dogs Order.—This Order and the Regulations made in terms thereof require (1) the wearing by dogs of a collar bearing the name and address of the owner, and (2) the maintenance of dogs under effective control between sunset and sunrise. The object of the Order is the prevention of sheep-worrying. Proceedings were taken against 29 persons for breach of the Order or the Regulations. Of these, 18 persons were admonished and 11 were fined sums varying from 1s. upwards.

Warble Fly (Dressing of Cattle) Order.—This Order, which has been made on representations to the Ministry of Agriculture, by agricultural and other interested bodies, has, for its object, the control and ultimate eradication of the warble fly of cattle. The warble, which is the maggot of one of the flies, *H. lineatum* or *H. bovis*, is found in nodules under the skin of cattle during the months February to June. The resultant damage to hides is responsible for heavy annual losses. The warble can be easily destroyed in its situation beneath the skin by dressings applied to the nodules or after removal from the nodules. The Order makes it compulsory to dress all affected cattle at monthly intervals between the middle of March and the end of June, with an approved dressing, or, alternatively, to squeeze out and destroy all ripe maggots at intervals of not less than ten days.

All owners of cattle in the City were notified of their obligations under the Order and were supplied with the Ministry's leaflet on the warble fly and the methods of destruction. Visits were paid to stockowners during the compulsory dressing period and there is every reason to believe that they made an honest effort to comply with the Order. It may be observed, however, that one is dependent, almost wholly, on the honesty and the voluntary co-operation of the stockowner, since the Order, as at present framed, makes no provision whereby an effective check can be made.

Importation of Animals.—(1) Irish and Canadian Cattle, including pigs. The Orders which control the importation of Irish and Canadian cattle, provide that the imported cattle must be landed at ports approved for the purpose, where, on arrival, they are inspected and thereafter they may be moved on licence, in the case of fat cattle, to a slaughterhouse, either direct or through an authorised market, and, in the case of store cattle, to (a) a specially authorised market, or (b) farms or other premises where they must be detained for six days after arrival, and, in the case of pigs, to premises for isolation and detention for 28 days.

The total number of Irish and Canadian cattle received into the City during the year was 21,900, including 20,785 licensed from ports to Gorgie Market, 646 licensed from ports or outside local authorities to places of detention in the City, and 469 licensed from ports to Gorgie Abattoir. 1,112 licences were issued authorising movement of imported cattle from Gorgie Market.

(2) Dogs and Cats.—The Importation of Dogs and Cats Order is intended to protect Great Britain against the introduction of rabies through the agency of canine or feline animals brought from overseas. The landing of such animals in Great Britain is prohibited except under licence granted by the Ministry of Agriculture. After landing, the animals must be detained for six months in a place of detention or quarantine

approved by the Minister for the purpose. Performing animals may be moved from place to place under strictly controlled conditions which are endorsed on the licence and subject to the previous approval of the Ministry in respect of each movement. Thirty-seven performing animals were received in the City under the Ministry's licence.

During the year, 40 canine and feline animals were received and detained in the City in quarantine. They were maintained under observation and police supervision.

(3) **Horses.**—Eighty-nine consignments, comprising 1,319 horses, were landed at Leith Docks from Iceland, Holland, Denmark, Belgium and Germany. The horses were released after inspection and on submission of the necessary certificates.

The Animals (Importation) Order of 1930.—This Order makes it unlawful to bring into any port in Great Britain ruminating animals or swine which have been on board a vessel whilst in a port in a prohibited country, whether taken on board the vessel in a prohibited country or not. There was no breach of this Order at the Port of Leith during the year.

Certification for Export.—The Dominions of Canada and New Zealand require disinfection and certification of straw and hay used for packing goods exported from this Country to the Dominions. Facilities are provided for the disinfection of straw and hay used for packing, at an old Municipal Disinfecting Station, at a small charge to cover costs. During the year, 81 certificates were issued to cover goods exported in disinfected straw. Surprise visits were paid, from time to time, to the packing establishments of exporters to ensure that the conditions necessary for certification were being complied with.

In addition to the above, certificates were granted, after the necessary inspection, to cover export of pigs to Northern Ireland, Canada and South Georgia, of wool to Poland and the U.S.A., of animal casings to Denmark, Holland, South Africa, Poland and the U.S.A., and of brushes to New Zealand.

Sea Transport of Animals.—The Animals (Sea Transport) Order prescribes the accommodation and fittings which must be provided on board ship for transport of animals by sea. It deals also with the protection of animals against unnecessary suffering during sea transport to or from Great Britain. Inspectors of the Ministry maintain supervision of the overseas transport and especially of the export of horses to the Continent, but supervision of the coastwise traffic devolves, in a large measure, on the officers of the Local Authority. Animals were landed at Leith Docks from coastwise vessels, during the year as follows:—Horses 124, Cattle 284, Sheep 32,712, Pigs 407. The cleansing and disinfection of the vessels after landing of the animals was carried out under the supervision of the Officers of the Local Authority.

The Transit of Animals Orders are similarly designed to protect animals during transport by road or rail and, in addition, prescribe cleansing and disinfection of cattle trucks, motor and horse-drawn vehicles used in the transport of animals. The Markets Committee have continued to provide facilities and labour at Gorgie Markets for the cleansing and disinfection of road vehicles. 6,044 vehicles were cleansed and disinfected at Gorgie Markets during the year, an average of 116 vehicles per week. The Railway Companies have satisfactorily discharged their obligations in the cleansing and disinfection of cattle trucks, railway sidings and approaches.

The Markets, Sales and Lairs Order.—This Order regulates many features in the construction of live stock markets, and provides for cleansing and disinfection on each occasion after use. All the Marts at Gorgie are well constructed for efficient and relatively easy disinfection. Regular supervision has been maintained and the work has generally been well done.

Summary of Contraventions of the Diseases of Animals Acts and Orders dealt with during the year :—

Orders.	Number of Cases.	Results.
Transit of Animals (Amendment) Order, 1931	1 2	Fined £1 10s. Fined £1.
Swine Fever Order, 1908	1	Deserted.
Control of Dogs Order	2 3 5 1 18	Fined 10s. Fined 5s. Fined 2s. 6d. Fined 1s. Admonished.

Protection of Animals (Scotland) Act, 1912.—During the year, 42 animals were found in the Markets suffering from disease or injury which exposed them to unnecessary suffering if put through the ordinary procedure of exposure for sale and disposal. As the result of the action taken, all of these animals were passed to Abattoirs and there slaughtered.

Lighting and Cleansing Department Stud.—Five hundred visits of attendance were made to the stud under the control of the Lighting and Cleansing Department, and 7 horses were subjected to inspection and examination prior to consideration of purchase for the Lighting and Cleansing Department.

Police Mounted Contingent.—Sixty visits of attendance were made to the Police stables. Two horses were examined prior to purchase and were approved by H.M. Inspector for Constabulary.

Corporation Farms.—The Department has continued to provide the clinical services required in connection with the stocks at Colinton Mains, Bangour and Roddinglaw Farms.

Staff and Police.—I desire to express my thanks to the Staff of the Department for their assistance and for the efficient manner in which they have carried out their duties during the year. I also wish to express my gratitude to the Chief Constable for his willing co-operation, and to the Officers of the Police Force, whose assistance has contributed materially to the efficient performance of the duties under the Diseases of Animals Acts.

I am,

Ladies and Gentlemen,

Your obedient Servant.

A. GOFTON, F.R.C.V.S.,

Chief Veterinary Inspector.